

# RAILWAY AGE

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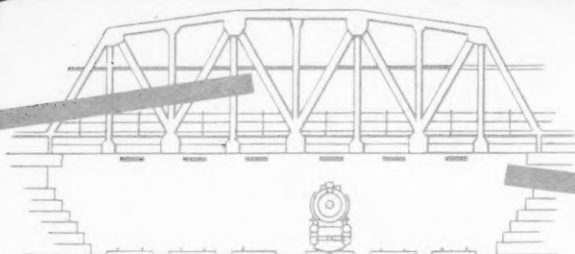
MAY 3, 1947

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FOUNDED IN 1856

## BYERS WROUGHT IRON BLAST PLATES

Combat a double-dose of  
Corrosion here



A combination of acid-bath and sand-blast would certainly never be regarded as a good life-extender for bridge members—yet that's exactly what the beams and girders get when a locomotive passes underneath.

The flue gases always contain carbon compounds and moisture, and sulfur compounds are generally present. These unite to form dilute acids, that are extremely aggressive. Ash and cinders, expelled at very high velocity, have a sand-blasting action that tends to remove surface scale, and leave the bare metal exposed to fresh attack.

A new bridge built by the American Bridge Company for the Union Railroad at East Pittsburgh, Pa., was exposed to a double-dose of corrosion, as it not only carried railroad traffic, but also over-passed it. The engineers used a

time-tried method of shielding the bridge against damage, by installing blast plates, above and below, of Byers Wrought Iron.

The wide-spread use of wrought iron for this service goes back to the days when the entire structure was built of this material. Engineers, remembering that such bridges were highly resistive to corrosion from blast gases, started to shield the exposed parts of modern bridges with wrought iron. In some recorded cases, wrought iron has stood up under attack for 50 years or more.

There is a double reason why wrought iron serves so well in this

application. The tiny fibers of glass-like silicate slag threaded through the body of high-purity iron act like baffles, to halt and disperse attack, and so discourage pitting. Furthermore, these fibers help to anchor the initial protective film, resisting the sand-blasting action, and shielding the underlying metal.

You will find some information on blast plate installations in our bulletin, "Wrought Iron for Bridge Construction." Ask for a copy.

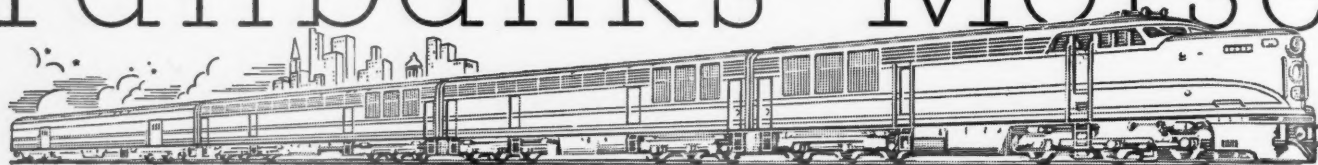
A. M. Byers Co., Pittsburgh, Pa. Established 1864. Boston, New York, Philadelphia, Washington, Atlanta, Chicago, St. Louis, Houston, Salt Lake City, Seattle, San Francisco.

**BYERS**  
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TUBULAR AND HOT ROLLED PRODUCTS

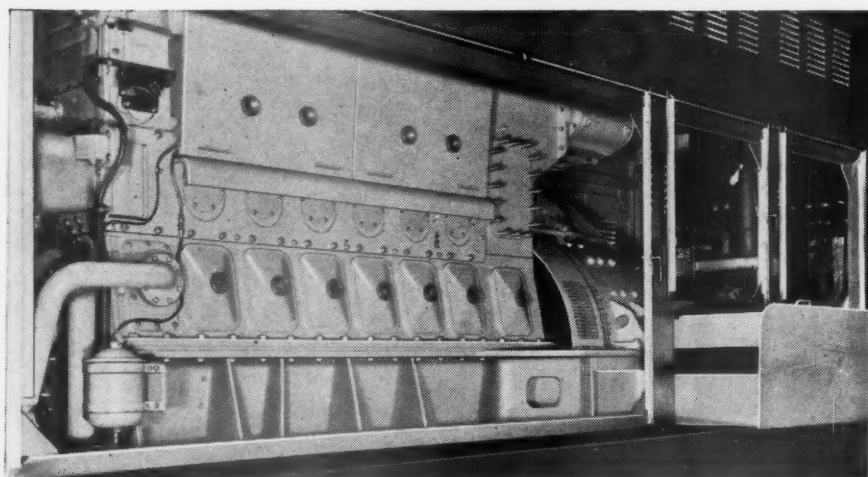
ELECTRIC FURNACE QUALITY ALLOY AND STAINLESS STEEL PRODUCTS

CORROSION COSTS YOU MORE THAN WROUGHT IRON

# Fairbanks-Morse



## FAIRBANKS-MORSE LOCOMOTIVE HAS ACCESSIBILITY PLUS!



### *Ample Space Provided for Routine Inspections, Adjustments*

Nothing pleases a maintenance man more than to have in his charge equipment that (1) needs minimum servicing, and (2) is easily accessible whenever routine inspections or adjustments must be made. Fairbanks-Morse diesel-electric switching locomotives more than "fill the bill" on both counts—as any maintenance man who has worked with them will readily testify.

Whether the maintenance man wants to inspect the powerful Fairbanks-Morse opposed-piston diesel engine or any of the auxiliary equipment, he finds ample space in which to work. In the switching and road type locomotives large steel doors are provided through which all ordinary inspections and adjustments can be made. When the occasion calls for further work, both the doors and door columns can be removed on both sides of the power plant compartment. Automatically controlled radiator shutters are provided at the sides and top for correct temperature regulation, and there are louvers to keep the engine supplied with air and to ventilate the compartment.

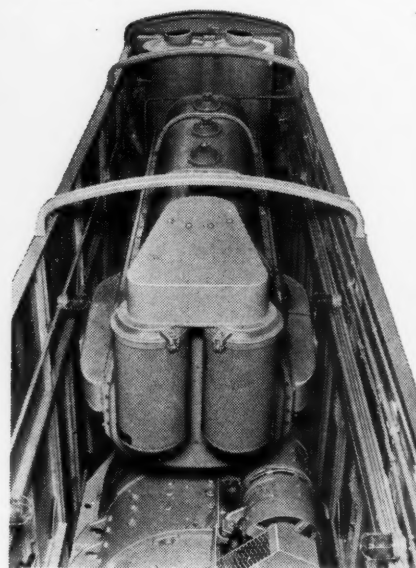
The diesel engine itself (operating on a principle of two pistons in each cylinder

driven apart by central combustion) is equipped with many removable covers so that virtually the entire engine can be exposed, and inspected and serviced through these openings.

Moreover, there is extra roominess in the front end of the locomotive—a feature that facilitates servicing all auxiliary equipment located here. There is a panel of electrical connections located at the rear of the engine compartment, and this is easily reached through a door leading from the engine's cab. The entire roof over the engine and generator of the power plant compartment is divided into sections which are easily removable, permitting easy access to the top.

Fairbanks-Morse engineers were also generous with space when they designed the engineer's cab of this switching locomotive. There is extra roominess here, an important consideration for the men who operate the locomotive. Seats and arm rests are cushioned, controls and instruments are of the latest type and conveniently placed to facilitate operation. The cab is equipped throughout with large, safety-glass windows for clear, unobstructed vision. Moreover, these windows

Side view shows how, with sides removed, the Fairbanks-Morse opposed-piston diesel engine is easily accessible in the 1000-hp. switcher.



Top view of Fairbanks-Morse 1000-hp. switcher shows roominess on each side of opposed-piston diesel engine.

...

will not steam or frost in cold weather because it has an efficient forced air ventilating system which warms the cab interior and keeps a continual turnover of fresh air circulating through it.

Top to bottom, front to rear, Fairbanks-Morse locomotives are an outstanding contribution to modern-day railroading. They are equipped with the famous Fairbanks-Morse opposed piston diesel engine. This engine has no cylinder heads, no valves, no valve-activating mechanisms. With a minimum of moving parts to wear or require adjusting, maintenance work is thus kept at a minimum. Their growing reputation for dependable operation, low maintenance, and high availability is substantiated by the steadily increasing number of railroads that are putting them into service today. *Fairbanks-Morse: a name worth remembering.*

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Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price \$6.00 for one year U. S. and Canada. Single copies, 50 cents each. Vol. 122, No. 18.



# Railway Age

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name registered in U. S. Patent Office.

Vol. 122

May 3, 1947

No. 18

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA 23, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK 7, N.Y., AND 105 W. ADAMS STREET, CHICAGO 3, ILL.

WASHINGTON 4, D. C.: 1031 NATIONAL PRESS BUILDING—CLEVELAND 13: TERMINAL TOWER—SEATTLE 1: 1033 HENRY BUILDING—SAN FRANCISCO 4: 300 MONTGOMERY STREET, ROOMS 805-806—LOS ANGELES 14: 630 WEST 6th STREET—DALLAS 4: 2909 MAPLE AVENUE.

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Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.), and is indexed by the Industrial Arts Index and by the Engineering Index Service.



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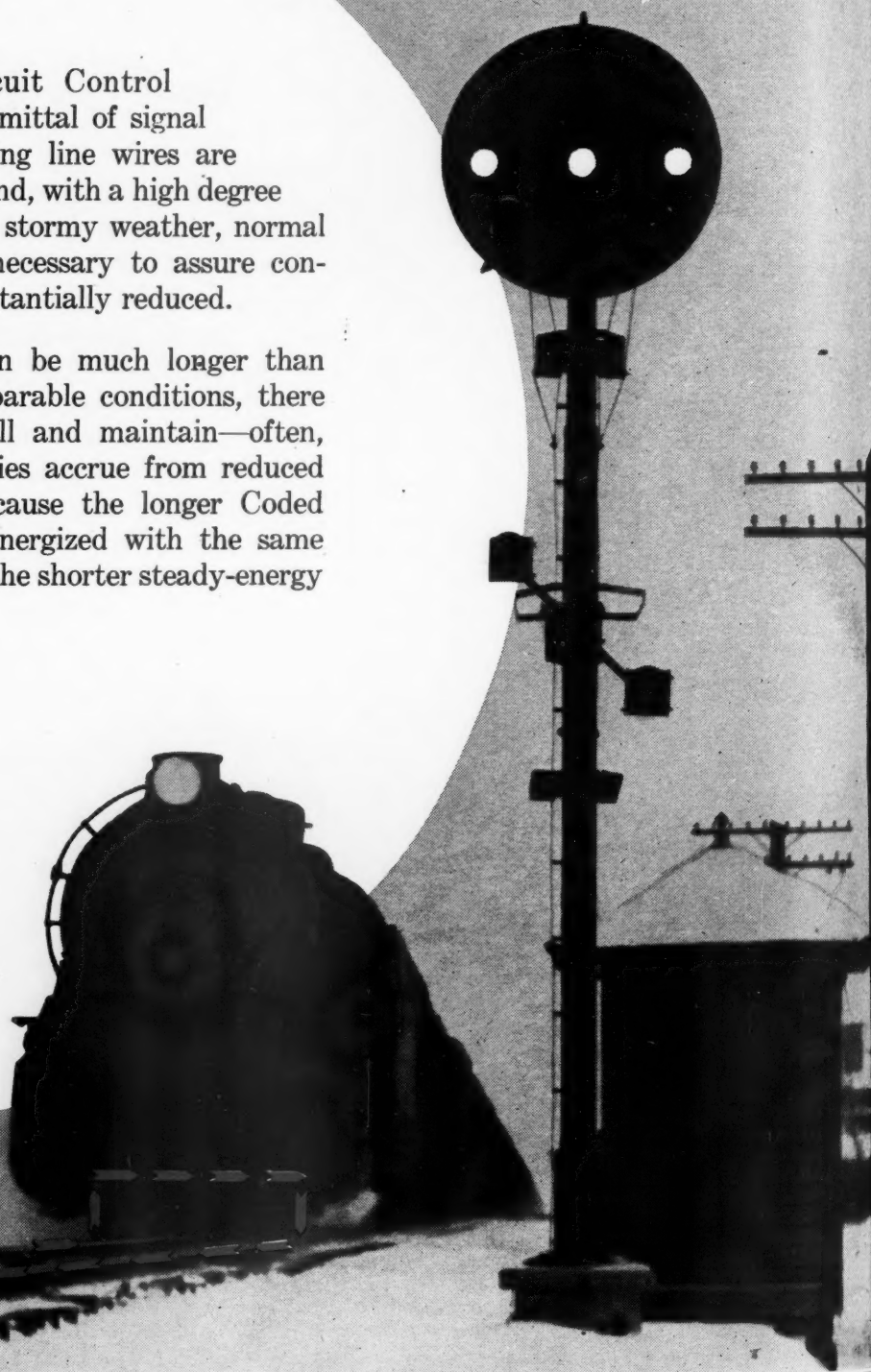
NEW YORK

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## RAILWAY AGE

### Still Not Enough Steel for Freight Cars

Despite pressure on the steel industry to revise its allocations to make available to the car builders and railroads sufficient material to allow the production of 10,000 new freight cars monthly, grave doubts persist that enough freight cars will be built by the end of the year to make a real dent in the present severe car shortage.

It has previously been estimated in these columns that the minimum requirements of the railroads call for the delivery of 120,000 new freight cars during 1947. This would not be enough to provide anything for a margin of safety but would just enable the railroads to scrape by without *serious* shortages.

#### How Many Delivered Cars?

The first quarter of the year has passed and during that time only 8,200 cars have been delivered. The Office of Defense Transportation, in a report issued on April 3, disclosed that the increased tonnages of steel promised by that industry to build up the output of freight cars to the 10,000-a-month quota "would be made available to the greatest extent possible for June rollings," and that the program would not be placed in full effect until July rollings. It is further revealed that this level will be continued only through August (based on two months' "lead time" between production of the steel and the completion of the cars) because the builders' shipping schedules indicate a decline after October from the 10,000-car level.

How does all this translate in terms of new car deliveries in 1947? Allowing two months' "lead time" at the beginning of the program, as the steel industry has at its end, and assuming that the steel industry will better its promise by meeting its full quota under the expanded program in June, then the monthly output of 10,000 cars will be reached in August and will continue through September and October. The monthly average output during the first quarter was, in round numbers, 2,700 cars and the best we may assume for the months of April to July, inclusive, is progress from the present low output toward the goal of 7,000 cars a month first proposed by the steel industry, before it reluctantly assented to the higher objective of 10,000. In other words, an average of 5,000 cars a month might be attained from April through July. Then, how about November and December? If the steel industry, in planning future allocations, terminates its expanded-quota program for

the railroads with August what prospect is there that it can be reinstated? Will output for the last two months revert to the 7,000-car level or go back to 3,000 cars a month?

An optimistic estimate would go something like this: Add to the 8,100 cars produced during the first quarter 20,000 cars for the four months of April to July, inclusive, 30,000 cars for August to October, inclusive, and 14,000 for the last two months of the year, and the sum is 72,000. A less optimistic, but probably more realistic, estimate would allow an average of 4,000 cars a month for April-July and November-December, reducing the total by 10,000 cars. The resulting 62,000 cars would amount to little more than one-half the minimum requirements for new cars to permit the railways barely to render the full transportation service desperately needed by the industrial and commercial business of the country.

In the meantime, according to monthly reports of the American Railway Car Institute, the backlog of cars on order continues to rise (from 75,578 on February 1 to 94,947 on April 1) and orders are being placed at the rate of 12,000 cars a month.

#### Where the Responsibility Rests Now

The railroads have been criticized frequently for permitting the present deficiency in freight-car supply to accumulate. It is held against them that they did not take advantage of the prewar offer of government loans on "favorable" terms for the purchase of freight cars. During the summer of 1941 Jesse Jones, then head of the Reconstruction Finance Corporation, was talking in terms of a billion-dollar freight-car pool. But what kept the railroads from securing car deliveries during 1942, 1943 and 1944 was not the need of financial assistance from the government. It was material shortages caused by the tremendous expansion of the war production program and the lack of support from the government for providing the materials needed by the railroads.

Now it is no longer the government which is responsible for the inability of the railroads to acquire new freight cars. It is the unwillingness, or inability, of the steel industry to reduce the amount of steel allocated to its other customers. This raises a question for the serious consideration of these other customers. Some of them, no doubt many, are suffering loss of production for the lack of an adequate car supply. They might,

within a few months, be farther ahead in production if they were to relinquish a part of their present steel quotas in favor of the immediate stepping up of the freight-car building program of the railroads. It is a Pyrrhic victory for a manufacturer to win a large allocation of steel at the expense of a maximum program of freight-car building, only to have the shortage of freight cars hold down his production and deliveries to a point below what they would have been with a more modest quota of steel.

## Double Crosstie Life

The railroads, the lumber and wood-preserving industries, and crosstie producers are being asked by the National Lumber Manufacturers Association, through its Committee on Products and Research, to cooperate in a joint endeavor which, in economic importance, could rival the development many years ago of successful methods of preserving crossties against decay. This endeavor is to be a united attack, using all the specialized talents and experience of each industry, on the mechanical wear or destruction of ties as the result of plate cutting, spike killing, splitting and other causes, which is costing the railways hundreds of thousands of dollars annually and resulting in a huge and unnecessary waste of the country's timber resources.

This proposal was brought to the attention of the wood-preserving industry, many tie producers and many railway men at the annual meeting of the American Wood-Preservers' Association in Portland, Ore., on April 22, in a paper on the Need for Reducing the Mechanical Wear of Crossties, prepared jointly by a representative of the Nettleton Timber Company and two representatives of the National Lumber Manufacturers Association. In that paper, which is abstracted briefly elsewhere in this issue as a part of a report on the A. W. P. A. convention, the authors picture the problem vividly with shocking records of premature tie renewals because of mechanical failure, and throw down the challenge of "double the life" in this statement: "When it is remembered that the average life of ties was about trebled by preservative treatment, it is reasonable to expect that an adequate research program can provide processes that will at least double the current service life of treated ties."

Addressing the producers and treaters, the authors said frankly: "Forest products engineers, in our opinion, are confronted with the problem of either improving the mechanical properties of wooden crossties or watching substitute materials make the most serious bid for the crosstie market yet put forth." And turning their attention to the railroad men, they might well have reminded them that, as those who stand to benefit most by increased tie life, they cannot side-step responsibility in sharing in the effort for improvement.

The proposal of the N. L. M. A. is now under consideration by the railroads' representatives. There appears to be a good reason why they should respond with enthusiasm to the invitation, and proceed to lick this problem, as, with the aid of the rail manufacturers only a few years ago, they similarly overcame the equally costly and exasperating problem of removing the primary cause of transverse fissures in rails.

## A C. T. C. Control Machine Can Be Located Anywhere

When planning a centralized traffic control installation on a certain railroad recently, the chief operating officer asked where the control machine would have to be located, and the signal engineer replied to the effect that, in so far as circuits are concerned, the control machine could be located anywhere. Therefore, he indicated, the location should be determined by the operating officers on the basis of local operating conditions and personnel considerations. That sort of answer represents a change which is worthy of explanation and consideration.

Basically, the power switches and signals at sidings in C. T. C. territory are the same as separate remotely-controlled interlockings, and the fundamental reason why it is practicable to control all these widely scattered interlockings from one machine is the development of the code system, by means of which both the outgoing controls from the machine and the incoming indications can be handled over one two-wire line circuit. The code apparatus could be built to handle any number of power-switch and signal layouts at sidings or junctions, but the maximum is determined by the numbers of control and indication codes to be transmitted, and these, in turn, are determined by the number of trains and the location of the office. If the limit is exceeded, some trains may be delayed waiting for codes to be transmitted over the line circuit. As a general rule, 35 field layouts have been considered as about the practical limit to be controlled by one line-coding system operated on two wires. In consideration of these various factors, some C. T. C. control machines in past years were located at the approximate center of extended territories so that a separate line-code system could be used in each direction. This arrangement was satisfactory as applied in short territories, but as these installations were extended over the major portion, or all, of an entire engine district, there was an increasing demand for the control machines to be located, not at outlying offices, but, rather, in the division operating headquarters. This objective was made possible by the development of electronic equipment known as coded-carrier apparatus, which can be used to transmit the C. T. C. control and indication codes any distance desired. Thus, the control machine need not be at the center or at one end of each short section, but rather can control an entire engine district or even two or more such districts, and can be located in division headquarters.

For example, by the application of coded carrier, the St. Louis-San Francisco has consolidated the controls for 175 miles of C. T. C. in the division headquarters at Springfield, Mo. On the Western Pacific, the control machine for 116 miles of C. T. C. between Portola, Cal., and Oroville, as originally installed, was located at a mid-point in the territory, at Keddie, Cal., where adequate living facilities for employees were lacking. As a result, experienced men would not stay on the job, but exercised their seniority to work elsewhere. By applying the coded-carrier equipment, the machine was transferred to division headquarters at Sacramento,



Cal., which is 66 miles west of the west end of the C. T. C.

In 1937 the Burlington installed C. T. C. on a complete engine district of 112 miles between Akron, Colo., and Denver, with the control machine at Brush, Colo., an intermediate station in this territory. In 1946 C. T. C. was extended eastward 143 miles from Akron to McCook, Neb., the machine for the Akron-Denver territory being moved to McCook, and the new machine for the Akron-McCook section being installed at McCook. Thus, by means of code-carrier apparatus, the entire 255 miles between Denver and McCook is controlled from the division headquarters at McCook. Also, C. T. C. is in service eastward from McCook to Hastings, Neb., 131 miles, which, by means of coded-carrier, is controlled from a machine in the McCook office. Thus the C. T. C. on the 386 miles between Hastings and Denver is controlled from the division headquarters at McCook. C. T. C. has grown to be a facility for application to entire operating districts, with control at division headquarters.

## Designs for Clearance

In wartime there must be transported over the railroads oversize and overweight shipments which, in peacetime commercial practice, do not exist, or are not moved at all, because of the expense entailed. Big, awkward launchers for temporary military bridges, captured enemy coastal guns, and launching cars for V-2 rockets are examples of the loads which actually moved on our domestic railroads in World War II. Heavy boats went coast to coast by rail in emergency situations. Heavy machinery, partially assembled, traveled long rail distances to the Canol project. Broad-gauge locomotives for Russia rode on special car mountings from Eddystone and Schenectady to the north Pacific coast.

Military freight of this order posed serious problems for railroad operating departments. For one thing, the number of shipments requiring special clearance handling far exceeded the normal volume. For another, many of the items had never before been seen by railroaders. Finally, the exigencies of war brought the clearance problem to routes unprecedented in length and diversity. Then, there existed in most cases the pressing necessity for speed. The normal leisurely method of handling the occasional electrical transformer or oil cracking column by informal contact between connecting roads was not good enough.

The Army and the railroads tackled the problem from both sides. A highly-experienced clearance officer on a large railroad system in an industrial region was "loaned" the Army; donned the military tunic; and established a means of "screening" all requests for routing (routine for carload shipments under the Army's centralized traffic control administration) to determine whether clearance was involved. If it was, he devised a tentative route, on the basis of his own extensive file of route restrictions; checked with the clearance man of each carrier involved before the shipment was released from destination—or, in most cases, even loaded—changed or "firmed" his original route; and, finally, informed the origin point how to load the shipment so

as to reduce clearance hindrances to the utmost. This officer is said to have had one of the largest telephone bills in Washington, but he saved untold costly re-routings and stranding of "rejects" on interchange tracks. The railroads gave him the detailed information he required for his files and, in the knowledge that shipments had been carefully measured, loaded and routed, expedited their interchange inspections and acceptances.

Tackling the other side of the problem, the Transportation Corps sought—and gained to a fair extent—authority to advise other arms and services of the Army how to design procurement items so as to obtain the best possible transportation route clearance characteristics. Thus, it was found that the cabins of small harbor craft could be so fitted as to allow transportation on flat cars. Again, useless protruberances were eliminated on demountable field control housings.

Practically everything the Army buys and uses must be shipped to its field of action. Hence, the product might as well be made "susceptible" to easy shipment by land carrier in the first place. The armed forces contemplate a gigantic program of research and development. New implements of warfare—never before seen or transported—will be the result. It is important that the railroads and the Army and the Navy join in a program to see to it that the new munitions of war are made as easily transportable as possible.

Brigadier General P. F. Yount, assistant chief of transportation of the Army, has pointed the way:

"... During the years of peace it behooves the Army to work with the rail carriers in order to set up a co-ordinated system for the exchange of information ... with particular emphasis on outsize freight ... which may be developed in the future. By the same token, the Army should keep abreast of the developments and capabilities of rolling stock and should be guided in its development of equipment by that knowledge."

## Delicatessen

### Ticket Sales

Surely no passenger traffic is more vulnerable to competition of the air lines than that having its origin in the large cities. Yet railroad city ticket offices, which were first established to offset the disadvantages of not-too-centrally-located railroad stations, close shop along with the stores and business houses that cease operation at 5 or 6 in the evening. In contrast, air line city ticket offices, which seem to grow larger and more elaborate from day to day, are wide-open for business into the wee small hours. It is the story of the grocery store versus the delicatessen.

Travel information after business hours, and on Sundays and holidays, is often sought but not always easy to find, and, if prospective travelers continue to follow the path of least resistance, surely they will fall easy prey to the night sales forces of the air line city offices.

To open *railroad* city ticket offices, at least for a skeleton "second trick," in the larger cities, so that train travel information, tickets and reservations would be as readily obtainable as those for air travel, would seem to merit looking into as a wise and timely move.

# Wood Preservers Meet on Pacific Coast

**Three-day session at Portland, Ore., features both technical and highly practical discussions aimed at prolonging the life of timber products**

**M**EETING in the state that leads all of the other states in the production of forest products, the American Wood-Preservers' Association held its forty-third annual convention in Portland, Ore., April 22-24, in an atmosphere literally permeated with the odor of newly-sawn timber and a wide variety of timber preservatives. It was the third time that the association had met on the Pacific coast, it having convened in San Francisco in 1921 and in Seattle in 1930, and it made the most of it, crowding into its three days of busy sessions, visits to a number of sawmills and treating plants, as well as several social functions.

## Many Features

Throughout, the program, which included 24 committee reports and 14 papers, was a succession of technical discussions devoted to the problems of the wood-preserving industry and the users of timber products, with the railroads, still the largest single consumer of treated woods, receiving major attention. While all of the reports and papers dealt with subjects closely related to the problems of the railways, either as treaters themselves or users, highlights of the meeting from their standpoint included a paper by Messrs. Jefferson, Rishell and McKean, as abstracted in the following columns, stressing the need for improving the mechanical service of railroad crossties; a visual report, in the form of a motion picture, by the Committee on the Handling of Forest Products, of which A. E. Larkin, manager, Republic Creosoting Company, was chairman; and a "lantern-slide paper" by R. M. Alpen, superintendent of wood preserving plant, Southern Pacific, on Recent Developments in Wood Preservation on the Southern Pacific. Still other features of the program were the various reports dealing with the fireproofing of timber, with supplemental remarks by H. M. Church (C. & O.) relative to the use of fire-resistant-treated lumber on his road, and the report on bridge and structural timber, by a committee of which T. H.

Strate (C. M. St. P. & P.) was chairman.

The motion picture report of the Committee on the Handling of Forest Products dealt exclusively with the fully mechanized tie-handling operations of the Southern Wood Preserving Company at Atlanta, Ga., which have completely replaced the manual handling of ties at this plant, involving the handling of some 60,000 to 80,000 ties a month.\*

All of the sessions of the meeting were presided over by President R. H. Rawson, consulting timber engineer, Portland, assisted by Vice-President A. J. Loom, general superintendent timber preservation and tie treating plants, Northern Pacific, Brainerd, Minn.

Total registration was 496, compared with a registration of 366 members and guests at last year's annual meeting in Cincinnati, Ohio. The secretary's report showed an all-time high of 1,115 members, a net gain of 170 during the year.

In the election of officers for the ensuing year, Mr. Loom was advanced to president; G. B. McGough, Bond Brothers, Louisville, Ky., was advanced from second vice-president to first vice-president; J. S. Giddings, superintendent of treating plant, A. T. & S. F., Somerville, Tex., was elected second vice-president; H. L. Dawson was re-elected treasurer; and the following were elected to the executive committee—J. B. Akers, chief engineer, Southern; J. O. Blew, Jr., Forest Products Laboratory; and L. J. Jacobi, engineer, Detroit Edison Company. St. Paul, Minn., was selected for the convention next year, which will be held April 27-29.

In his presidential address, Mr. Rawson spoke of the large forest reserves of the "convention" state, present conditions in the wood preserving industry, and the need for continued research in the solution of timber-preservation and utilization problems. He said in part:

"Oregon is equipped by nature to

\* A complete description of this equipment appeared in the *Railway Age*, July 13, 1946.



grow trees. Here, 60 cents of every payroll dollar comes from the forest products industry. Twenty-five per cent of the total commercial soft wood species of standing timber in the United States is located in Oregon. Many of our sawmill operations are now on a sustained yield basis and the timber interests in the Pacific Northwest are solidly back of tree falling which contemplates planting sufficient trees to insure a perpetual supply of timber.

"The present year finds the wood-preserving industry going through a period of readjustment or reconversion. Some treating plants in some sections of the country are not operating because they cannot get material to treat. In some sections, plants are not operating to full capacity because they cannot get preservatives. On the other hand, it has been reported that more than a dozen new plants have been built recently or are projected.

"Research is the key that will unlock the door to the most important phases of our industry. We have made considerable progress in the field of treating material for purposes other than the prevention of rot and attacks by insects and marine borers. During the recent war, fire-resistant treatment was developed to large proportions. Considerable progress has been made also in treatments that will modify the mechanical properties of wood and that will, in other ways, improve forest products to permit their use in places where they could never be considered before."

Stressing the need for improving the wear resistance of crossties in track, a paper by H. F. Jefferson (Nettleton



Timber Company) and C. A. Rishell and H. B. McKean (National Lumber Manufacturers Association) discussed the present situation as regards the mechanical destruction of ties and the economic importance of prolonging the service life of ties, and then challenged the wood-preserving industry to bend its efforts toward the solution of this problem. The authors said in part as follows, beginning with a quotation from an editorial in a recent issue of *Railway Age*:

"A conception of the inroads made on tie life by mechanical damage is given by the experience of a large middle-western railroad. Of the total number of creosoted pine, gum and oak ties removed from tie test tracks on this road from 1927 to 1943, inclusive, 58.5 per cent failed from mechanical damage with no important sign of decay. Only 16.7 per cent of the tie renewals in these tracks during this period were required primarily because of decay. Since the crosstie practices of this railroad are generally representative of other large systems, it may be assumed that these figures on renewals are also representative.

"A study of the American Wood-Preservers' Association's report on crosstie service discloses that mechanical failure is a very important cause of limited service life, especially with the less dense woods. In an extreme case 71 per cent of the ties installed in a test track failed as a result of mechanical conditions. These ties were creosoted Douglas fir having retention of 11½ lb. of creosote per cubic foot of wood.

"Assume that the average cost of treated ties delivered to the railroads is \$2 per tie, a very low average figure for today. Based only on the delivered price the annual charge at 4 per cent would be 14.7 cents for each tie having a service life of 20 years. If the service life is increased to 40 years through processing, the annual charge against each tie would be the same, 14.7 cents, with the initial cost of ties being \$2.91 each. Annual charges at 3 per cent for 20 years would be 13.4 cents per tie, which would allow an initial cost of \$3.10 per tie lasting 40 years. Notice that these figures do not include the cost to the railroad for installation, regaging, resurfacing and increased rail life. Since the railroads can make tremendous savings on these items, it is reasonable to expect that, other things being equal, the roads would gladly pay suppliers the extra 91 cents or \$1.10 per tie.

"Many crosstie producers and railroad maintenance men will, no doubt, scoff at the idea of doubling the life of crossties by providing improved mechanical performance. However, when it is remembered that the average life of ties was about trebled by preservative

treatment, it is reasonable to expect that an adequate research program can provide processes that will at least double the current service life of treated ties.

### Double Tie Life

"Forest products engineers, in our opinion, are confronted with the problem of either improving the mechanical properties of wooden crossties or watching substitute materials make the most serious bid for the crosstie market yet put forth. The solution of the problem is not yet at hand. However, one possibility is to use larger tie plates securely attached to the ties prior to arrival on the right of way. To develop this idea satisfactorily a procedure of causing some compression of the fiber under the tie plate, as well as methods of securely anchoring the plate in position, must be developed.

"Perhaps some synthetic resin can be added to the treating liquid. Such resins in proper quantities might provide increased hardness. Another possibility is to treat only the rail bearing area with a chemical. There is also the possibility of treating the tie at the rail bearing area and then permanently compressing the wood in this area, under heat and pressure, rather than adzing.

"Other suggestions, the merit of which can only be proven by research, are the use of hardened or end-grain dowels in the rail-bearing area; the use of densified wood under the tie plate; and changed design of ties and plates."

Closing their paper, the joint authors endorsed the efforts of the National Lumber Manufacturers Association to unite interested parties in an attack on the problem, and especially urged the railroads and the wood products industries to the fullest cooperation in this joint enterprise.

### Fireproofing Considered

The Committee on Fireproofing, of which R. H. Mann (A. W. P. A.) was chairman, presented a report on tests conducted to determine what effect specific gravity has on the results of fire-tube and crib tests—in other words, whether, with other things being equal, a denser species has a better chance of passing the tests than a lighter one. The lumber used in the tests reported on (50 pieces of Douglas fir, each 4 in. by 4 in. by 14 ft.) was purchased from a lumber yard without any attempt at selection, in order to secure a wider range of specific gravities.

Summarizing its findings the committee offered the following among its conclusions:

"With other things being equal, the results obtained from the fire-tube and crib tests vary with the specific gravity of the specimens. The heavier the

specimen, the lower will be the weight loss when expressed as per cent of the original weight. The results obtained from tests on pre-cut samples are better than results from tests on matched specimens cut from 4-in. by 4-in. pieces after treating, because of heavier absorptions in the former. The effect of specific gravity is less with pre-cut specimens than with specimens cut after treating, probably because of their heavier absorptions."

Supplementing the report of the committee, H. M. Church (C. & O.) told of the large covered merchandise pier built by his road during the war at Newport News, Va., in which all lumber and timber above pile cut-off was given a cromated zinc chloride salt treatment to refusal to obtain the benefit of both a preservative and fire retardant. This pier, which replaced a pier of similar size destroyed by fire, is 820 ft. long by 213 ft. wide.

### Laminated Bridge Members

The Special Committee on Preservatives and Fire Retardant Treatments of Laminated Members, of which D. L. Lindsley (J. H. Baxter & Co.) was chairman, presented a report on the tests made or to be made on glued-laminated bridge stringers built of pressure-treated wood by the Atlantic Coast Line, the Chesapeake & Ohio, and the Spokane, Portland & Seattle. Following brief tests made in 1944, the A. C. L., in conjunction with the American Lumber & Treating Co., undertook a more extensive stringer-building program early in 1946. More than 28 stringers were assembled, 8 of which were 7 in. by 14 in. by 18 ft., and 20 of which were 7 in. by 14 in. by 25 ft. These stringers were built of 2-in. by 8-in. and 3-in. by 8-in. Southern yellow pine in four different ways, as follows: (1) Stringers laminated with untreated wood and treated later with Wolman salts (Tanalith); (2) stringers laminated with untreated wood and treated later with creosote; (3) individual laminations treated with Wolman salts and then glued; and (4) individual laminations treated with creosote and then glued.

On the C. & O., tests were conducted using ten 7-in. by 16-in. by 14-ft. stringers built with 2-in. by 8-in. Douglas fir lumber using a phenolic resin glue. The stringers were then incised and pressure-treated with Type H Minolith fire retardant. After allowing the stringers to season for several months, two were tested in the C. & O.'s Huntington laboratory, where it was shown that the laminated stringers had roughly the same strength values in bending as a sawn Douglas fir stringer of equal size, density and moisture content.

On the S. P. & S., tests are to be

made on 9-in. by 18-in. by 28-ft. stringers, built up with 3-in. by 10-in. Douglas fir laminations, employing four combinations of treating and gluing, and employing both Tanalith preservative and Minalith fire retardant.

In another part of the report the committee described a two-span ballast-deck trestle on the Southern Pacific, near Durmid, Cal., employing laminated creosoted caps and stringers of Douglas fir. It also presented data developed by Geo. B. Fahlstrom (Casein Company of America) on the gluing of treated wood, with specific recommendations concerning the gluing of treated veneers and plywood treated by Protexol treatments, and the treating of plywood or laminated wooden materials.

### Fire Tests on Walls

Closely related to the above reports was a paper on Fire Tests of Treated and Untreated Wood Walls, by Nolan D. Mitchell (National Bureau of Standards), which described eight fire-endurance tests of solid walls of 4-in. and 6-in. nominal thicknesses of treated and untreated Douglas fir, supplementing 17 previous tests of solid wood partitions  $\frac{3}{4}$  in. to  $2\frac{1}{4}$  in. in thickness. Four of the eight solid walls were constructed of wood impregnated with chemicals. Two each of the 4-in. and 6-in. walls were tested under load; the others without load. It was reported that increases in fire endurance of 20 and 24 per cent were recorded for the loaded walls of chemically-treated wood, while increases of 29 and 33 per cent were recorded for the walls of chemically-treated wood, without load, over similar loaded and unloaded walls of untreated wood.

### Reports on Railway Uses

The report of the Committee on Bridge and Structural Timber, which committee was headed by T. H. Strate (C. M. St. P. & P.), presented the service records of five creosoted timber ballast-deck trestles on the Chicago, Milwaukee, St. Paul & Pacific, all built in the three-year period, 1906-1908. It also reported that cooperation of the Preservatives committee had been requested in the writing of a specification for an acceptable sealing compound for treating pile-cut-offs and cut surfaces.

In connection with its assignment to compile a list of parts of cars for which treated lumber has been used, the Committee on Uses of Treated Wood for Car Lumber, headed by H. R. Condon (Koppers Company, Wood Preserving Division), listed for 17 different railroads the uses of treated car lumber in 1946, which amounted to a total of 4,901,500 ft. b. m. The report also

stated that the Illinois Central's experimental refrigerator car, I. C. No. 51,000, constructed of aluminum alloy, used approximately 705 pieces, or about 2,755 ft. b. m. of salt-treated wood for 32 different parts or purposes.

It was reported that the Pennsylvania has inaugurated a program involving the use of salt-treated lumber for all box-car running boards; creosoted material for the flooring, upper decks, deck-bearers, floor supports and fillers of stock cars; and salt-treated lumber for the side slats, sheathing, roofing and running boards of stock cars.

In a paper on wood preservation by pressure methods in Great Britain, New Zealand, Australia and South Africa, Hal. E. Hickson, A. J. Jofeh and R. A. Bulman (Hickson & Welch, Ltd., and Hickson's Timber Impregnation Company pointed out that in these countries there is increasing activity in the field of wood preservation.

In Great Britain, it was said, alongside the continued use of creosote for the protection of exterior timbers, the modern trend is toward the use of treated wood for interiors. In South Africa, wood preservation is being called upon to meet an insect invasion. In Australia and New Zealand, use is being made of wood preservation to bring into commercial use indigenous timbers formerly considered unusable.

The increasing application of wood preservation to interior timbers, it was pointed out, together with the present shortage of creosote, is focusing attention on other preservatives, and water solubles are rapidly finding a place in the preservation industry.

Among the information presented by the Committee on Preservatives, which was headed by R. H. Baechler (Forest Products Laboratory), were comparable data on the results of inspections of Southern Pacific trestles, built between 1912 and 1917, inclusive, when low residue creosote was used to treat the supporting piles, and between 1918 and 1921, inclusive, when high-residue creosote was used. These data, among other things, showed an average service life of 23.96 years for low-residue piles that failed to date, and an average life of 16 years for corresponding high-residue piles.

### Chemonite Explained

Forming somewhat of a symposium, three papers were presented before the convention dealing with the development, service records and treatment by Chemonite—a proprietary wood preservative originated in 1924-1926 by Dr. A. Gordon (University of California) and subsequently developed by the Diamond Match Company and the Chemonite Wood Preserving Company.

In these papers, which were presented by Dr. Gordon, Emanuel Fritz (University of California), and Chester W. Ott (Northwest Chemonite Corporation), the chemical composition and properties of the treating solution were stated as follows:

"Chemonite solution consists of copper, arsenic, and ammonium acetate dissolved in ammoniacal solution. When the ammonia volatilizes, copper-arsenic salts precipitate in the wood. Since the salts cannot be injected into the wood in aqueous solution without the ammonia, the precipitated salts cannot be easily leached out of the wood with water. After the salts have precipitated, only acids and alkali will leach them out. In preparing the solution it is aimed to remove all soluble salts so that only the slightly-soluble copper-arsenic salts are precipitated in the wood."

As to the technical aspects of the treatment, it was pointed out that Chemonite treatment is a standard full-cell pressure treatment. As practically all of the wood treated is green, the treating cycle begins with a steam conditioning period, followed by vacuum, after which the treating solution is introduced into the cylinder without breaking the vacuum. Pressure is applied to the fluid for the time found necessary by experience to reach the required absorption and penetration. The amount of preservative solution being absorbed is continuously measured volumetrically by means of gage readings on the solution tank. After the required absorption has been reached, the treating solution is withdrawn from the cylinder, and a final vacuum is applied to reduce dripping.

In a series of notes on Chemonite and the characteristics of Chemonite-treated material, some of the observations were as follows:

"Chemonited material can be handled, fresh or seasoned, without hazard to humans. It hardens the wood slightly, and somewhat reduces its inflammability. Mechanical tests of the treated wood indicate no loss in strength. Nail holding power is increased.

"Painted surfaces on Chemonited wood retain their color as well as they do on untreated wood, and no peeling that could be attributed to the Chemonite has been noted or reported."

### Pressure Treatment

In a series of reports on the pressure treatment of various wood products, the committee on the Pressure Treatment of Lumber and Piles, of which P. D. Brentlinger (Penna.) was chairman, presented a progress report, and another committee, headed by J. D. McLean (Forest Products Laboratory),



presented a series of consolidated specifications covering the treating requirements for the pressure treatment of ties, lumber, poles and piles of miscellaneous species not now included in the Manual.

The Committee on the Pressure-Treatment of Inter-Mountain Fir and Western Hemlock, of which Paul Wayman (American Lumber & Treating Co.) was chairman, presented the results of a comprehensive survey as to current practices in the industry in the treatment of intermountain fir and Western hemlock, and, based on its findings, offered a number of recommendations affecting present standard and tentative specifications. It also presented new tentative standard instructions for the field treatment of creosoted timber and piles, with the recommendation that the present standard be deleted.

### Treatment of Poles

In a brief report by the Committee on the Pressure Treatment of Poles, of which G. Q. Lumsden (Bell Telephone Laboratories) was chairman, several revisions and recommendations were offered covering the present tentative standard for the preservative treatment of Western red cedar poles by pressure processes. Also, certain additions were recommended in the standard specification for the preservative treatment of round pine posts by pressure processes to cover the desirable retentions of the more recently approved salts, including chromated zinc chloride, Tanalith, zinc meta arsenite, and creosote-petroleum solutions.

The Committee on Poles—Non-Pressure Treatment, of which J. P. Wentling (Consolidated Treating Company) was chairman, presented a progress report dealing briefly with a number of new pole-tree species and a number of new non-pressure treating plants that have sprung up, largely in Montana, Idaho, Washington and Oregon, for the treatment of these new species. It was stated that, due to the unprecedented demand for poles, the non-pressure treatment of poles has been hastened, often without proved specifications, but based upon the best opinions and judgment of both the treater and user. Furthermore, it was said that it is too early to be able to evaluate the newer non-pressure process being used and to do more than state some of the apparent results obtained.

The report also presented data collected on the Osmoplastic method for the ground-line treatment of poles, and a paper by Ernest E. Hubert, Technical Development department, Western division, Monsanto Chemical Company, on the Non-Pressure Preservative Treatment of Poles With Pentachlorophenol in the Northwestern states.

The Committee on Tie Service Records, of which W. R. Goodwin (Soo Line) was chairman, presented a statement outlining various tests made by the American Railway Engineering Association on the Santa Fe and the Milwaukee. On special instruction to develop a procedure for the uniform recording and reporting of tie service records, the committee submitted a copy of the form used by the Committee on Ties of the A.R.E.A., and said that—in consideration of the established practice of inspecting and reporting on older tie tests, some of which have been in service more than 40 years, and in view of the form developed by the A.R.E.A. committee, which may be followed in reporting the newer tests—it is deemed advisable to develop further procedure for recording tie service records.

The Committee on Marine Pile Service Records, of which A. S. Daniels (Texas & New Orleans) was chairman, presented a proposed form for the uniform recording and reporting of service records. It was pointed out that the proposed form was prepared in order to be able to determine the causes for pile removals and their relation to preservation failure, decay, insect attack, wood defects, structural breakdown in wood, mechanical damage, and obsolescence. The report emphasized the advantages to be derived for such uniform reporting, but stated that, in the desire to attain uniformity, the importance of recording all significant data available must not be lost sight of.

The committee also submitted current reports on piling driven in San Francisco and Oakland piers of the Southern Pacific; on a bulkhead at Stone Harbor, N. J.; and on posts treated with pentachlorophenol and installed in the marine tests of the Southern Pacific at Galveston, Tex.

### Posts and Piles

In its report submitting data on the service records of poles under observation, the Committee on Pole Service Records, headed by C. H. Amadon (Bell Telephone Laboratories), stated that the relative lack of new information on previously reported installations was believed to be due to the disruption of inspection schedules during the past six years, but that prospects are good for reports in greater detail from inspections in 1947, and for reports on installations of new species treated with the new preservatives.

The Committee on Post Service Records, of which J. O. Blew (Forest Products Laboratory) was chairman, again brought its test service records up to date and called attention to a number of early failures.

In a detailed paper on the Mississippi fence-post service tests initiated by the

Forest Products Laboratory late in 1936 and 1937, at the Harrison Experimental Forest, near Saucier, Miss., Mr. Blew summarized the information gained in the initial 10 years of this test, as follows:

"(1) The untreated Southern yellow pine posts had an average life of 3.3 years.

"(2) The untreated posts set in poorly drained, wet sites, which failed mainly on account of decay, lasted longer than those set in drier, well-drained sites, all of which failed on account of combined decay and termite attack.

"(3) Most failures thus far can probably be attributed to the inadequacies of the respective preservatives under the conditions present in this test. A few failures, however, were due to inadequate penetrations and absorptions of the preservatives."

### Moisture Meters

Electrical moisture meters were discussed in a paper by H. W. Angell (Oregon State College) and W. A. McFarland (American Lumber & Treating Co.), which also described in detail tests which show how the preservative treatment of wood affects moisture meter readings.

Pointing first to the fact that electrical moisture meters are a means for measuring instantaneously the moisture content of wood, the authors declared that moisture meters are convenient, can be operated speedily, and provide the only practical method of determining the moisture content of finished woodwork in place without seriously damaging the wood. Such meters, they pointed out, are subject to errors resulting from characteristics of the wood itself and from extraneous materials in the wood which affect its electrical properties. Nevertheless, it was said, present-day meters are quite dependable on ordinary untreated wood when they are used properly with correction charts.

George M. Hunt (Forest Products Laboratory) and T. E. Snyder (U. S. Bureau of Entomology and Plant Quarantine) presented the eighteenth annual progress report of an international termite exposure test. This report gives the results of cooperative tests started in 1928-29 to compare the effectiveness of various preservatives in protecting wood against decay and termite attack in various parts of the world. The Committee on Inspection, of which H. F. Round (Penna.) was chairman, presented a brief report on mechanical and electrical means of inspection to determine internal decay in wood, and also described the use of several chemical stains to determine the heartwood and sapwood in Southern pine, Douglas fir, gums and other commercial species.

# Postwar Mechanical Problems

**While materials, handling equipment, and new shop and terminal facilities will play big parts in the future, training manpower will be of greatest moment**

**T**HE postwar battle began with 1946 and the first round is now over. 1946 was the heaviest peacetime traffic period since 1926. Passenger traffic was 50 per cent greater and freight traffic was 33½ per cent greater in 1946 than in 1926—this with 33½ per cent less locomotives, 25 per cent less freight cars and 25 per cent less employees. The net ton-miles produced per freight car per day went up from 659 to 944 and the net ton-miles per average freight-train hour on the road went up from 9,201 to 17,176. On the other hand, the price of materials went up 50 per cent and wages went up 85 per cent, leaving a 10 per cent decrease in freight revenues and a 33½ per cent decrease in passenger revenues.

## What the War Did

Railroad equipment had a lot taken out of it during the war which we expected to put back when the war ended, but we had not been able to do so. The ghost of a lot of substitute materials, used during the war period, was still with us. Parts which were made of inferior materials and by inferior methods were still in service and causing trouble. Even the locomotive fuel was far below the average grade that good performance requires. Such things compounded our difficulties and our expenses. During 1946 the railroads suffered also from the troubles of other industries. Material shortages and strikes in the steel and mining industries not only forced nearly a 20 per cent reduction in our repair and rehabilitation programs but almost brought our new equipment-building program to a standstill. Our supervisors are no longer cost conscious.

Our manpower, which we had hoped to restore to normal when the war was over, still was far below adequacy in numbers and quality. During the war we converted helpers and apprentices not yet graduated to mechanics, by the mere expedient of changing their rates of pay and giving them a mechanic's title—then did our best to educate them to do some useful job. We lowered the physical requirements and we raised the hiring age of new men in order to get

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any. As a matter of fact, I heard one mechanical officer say, when asked about his road's physical requirements for new men, "Hell, I just put my hand on their foreheads, and if there is the least warmth there, I hire 'em."

Some of these men did make good employees and are still doing good work for us, but—by and large—the majority are not in any way comparable, when measured according to ability, efficiency, loyalty or production, to their contemporaries—the old time railroad mechanic. They are indifferent, lay off without excuse, do only what they must and in general have the same effect on our personnel as a rotten apple in a basket of good ones.

For five years the war took the young men whom we might have been making into first-class mechanics and made soldiers out of them. Then, when Uncle Sam released them, he through the "52-20 Club," and by other financial underwriting of their lives, kept many of them from returning to us. Five years of retirements from the top of our employees and supervisory groups, and

five years of non-replacement at the bottom, is a total of ten years' loss. The working span of a railroad mechanic's life is between 40 and 45 years, hence we had an approximate deficit of 22 per cent in our ranks! 1946 did not improve the situation to any appreciable extent.

## Improvement Is Slight

As we entered 1947 our status with regard to this problem was but slightly improved. We have built up our apprentice and supervisory groups to some extent. We are bending every effort to train and develop these men. We still cannot hire a qualified mechanic for love or money. Our material situation is not much better, although there are rumblings in Washington which may produce helpful allocations of steel plates, sheets and shapes. On the other hand, no one is doing much to help the shortage of such items as nails, nuts, bolts, rivets, pipe and pipe fittings, copper wire, motors, electrical control equipment, lumber, etc., without an adequate supply of which our ability properly to maintain and keep in service our existing equipment is seriously threatened.

The shippers are crying for a more adequate supply of cars—approximately 133,000 additional are needed. Why don't we have them? During the war our building programs were stopped cold by "directives," and even the material then available was diverted to maintenance work. Since the war, material has only been available in quantities to produce a pitifully inadequate number of units. Cars ordered a year ago are still not laid down and the start of their delivery is months away.

A similar situation prevails with new motive power requirements. We have outgrown enginehouses, the average stall of which houses only the head end of our latest steam power. Shops are too small and are five years behind in the replacement of worn out and inefficient machinery. Cranes are too small, drop pits too few, too slow and inefficient. New repair facilities and shops for maintaining and servicing Diesel locomotives must be constructed. Material handling equipment is far short of an adequate complement of skids, lift trucks, tractors and other transport devices.

This article is an abstract of an address before the New England Railroad Club, Boston, Mass., April 8, 1947.



Passenger-car yards are too small for adequacy, their facility buildings and shops are old, dark and incapable of housing machines and equipment necessary to good maintenance of modern passenger cars with air conditioning, communication systems, intricate air-brake equipment and delicately trimmed interiors. Freight repair yards are adorned with a myriad of dilapidated so-called service buildings—for the most part old car bodies now only fit for termite food—and runways and crosswalks over which material must be transported and employees must walk are too often either badly maintained plank or just plain mud. Power plants contain boilers, generating equipment and air compressors which, but for the war, would have been replaced with modern, efficient units. And, in addition to all these drawbacks, we have usually provided employees with only such modern, up-to-date wash room, locker, lunch and toilet facilities as they have forced us to provide.

### Material Supplies Inadequate

An adequate supply of materials will require selling to Congress, the producers and the public the idea that only by giving their transportation systems the opportunity to acquire the necessary material to build new equipment, roadways and needed structures and maintain them to the necessary high standards can they expect to get business back on its feet. The brunt of that job will have to be carried by our executives, our legal and publicity departments. Our part will be to work with the purchasing and stores departments so that they will know well in advance what we need most, and in what order and quantities we need it. Then with the combined might of all departments, including ours, we must begin putting that material to work efficiently as it becomes available.

### Much Needed Facilities

An efficient material-handling system entails concrete runways, crosswalks, storage facilities, skids, lift trucks, tractors, monorails, cranes and any other devices which speed up getting material to and from the job, cut out handling or rehandling, conserve the manpower we do have, and cut costs. With skids and lift trucks many manual operations will be eliminated. Lift truck and tractor operation are completely effective only with such adjuncts as solid runways, ramps and an adequate supply of well constructed skids. The mechanization of these jobs, by speeding up the movement of the parts to the shops for repair and return, cuts down their out-of-service time and minimizes the numbers of spare parts necessary—a definite conservation of material. Another example at

the shops is found in the spring-building and repair plant. Efficiency and labor saving here must combine not only transports but layout. A plant which is laid out to move the material through in one direction from the dismantling position to the testing machine and then into skids for movement to point of application will easily reduce spare part requirements by 10 per cent and man-hours and costs 25 per cent.

A well designed flue repair shop will entirely eliminate all manual handling and testing, speed up production, and make several men available for other essential jobs. At an engine terminal the handling of driving wheels is always a problem. Drop tables which are of such size and design as to permit the dropping of from one to four pairs of driving wheels simultaneously are available. Such a piece of equipment in combination with a 10-ton monorail hoist for moving wheels to the machine shop or on a truck or car will cut the handling time and man-hours and at the same time increase production and materially reduce the out-of-service time of driving-wheel assemblies and expensive motive-power units.

At the freight-car repair yards the movement of material to the repair locations for application and scrap back to cars for shipment is always a problem. Here concrete runways, skids, tractors and trucks are invaluable in reducing costs and increasing production, that is, in producing more serviceable cars and making more men available for other essential jobs. The same thing can similarly be accomplished in coach yards.

We need modern, efficient machinery and tools to replace those we have been struggling along with or have done without entirely. That program got a terrific setback during the war, but now it can and should be accelerated. Nothing contributes more to the railroads' efficiency and reduces cost more. At the shops the cost reduction is immediately evident, but it is even more productive in the reduction of maintenance time and expense after units repaired in the shops are in service. The drop table at the enginehouse, previously referred to, a boring mill specially designed for driving-box work, a milling machine equipped to contour rods automatically, a hydraulic car-wheel borer, a modern flanging press, a car washer—these and numerous other modern machines will all pay for themselves in a surprisingly short time, and during that time turn out more and better work while making man-hours available for other essential jobs.

There was a time when the automobile designer who could hide the battery box in such a position that a maximum amount of the car had to be torn away to find it was the acme of engineering efficiency. For a while the railroad

equipment designer followed suit. He put in arch tubes so that it was necessary to drop the back drivers to roll them, the distributing valve behind a mass of pipes, the blow-off cock where the crew had to stand on their heads to get hold of it, the stoker engine under the deck to hide it, the brake cylinders where only the smallest employee could get at them to clean them or renew a cup. He hid the brake and spring rigging on cars under a skirt for beauty's sake and for the same purpose (with the pretext also of reducing wind resistance) covered the whole locomotive with so-called streamlining so that a mechanic had to have a map and a compass before he could locate the sanders. To top it all off he made the ash-pan capacity the same as a corn popper's and the builder went him one better by putting the Alemite fittings where you couldn't get a gun on them. Times have changed in this respect, though, and fortunately the trend is now reversed on both locomotives and cars. It is well that this is so, for the many complicated new devices now coming into use tax all maintenance forces to their limit without their having to suffer from inaccessibility of the parts.

### Better Care of Employees

Too often in the past we have given employees only the things they forced us to provide. We called these "concessions." Lord knows, we can't satisfy them all, for there isn't money enough represented by the national debt to do that. There are, however, certain things which they have a right to have and which we will actually save money by providing. I refer to such things as well heated and lighted shops; enginehouses with stalls long enough so that the doors can be closed in the winter, and with adequate light for inspection and repair work on dark days and at night; sanitary toilet facilities; modern wash rooms; satisfactory locker and lunch rooms; the best seats we can put in our locomotives for the crews; a little leg room for the engineman and fireman; a means of getting a sanitary drink of palatable water; office space for passenger conductors; comfortable cushions for the bunks in caboose cars, and a good grade of fuel for locomotives. Every one of these things will pay good returns in the way of better performance and increased efficiency, and cut down absenteeism, and perhaps through satisfying a large portion of our employees we can expect to boost individual employee's productivity from its present approximately 70 per cent to nearly 90 per cent.

We must provide an ample reservoir of efficient, well-trained, cost-conscious, loyal employees. This we must do through apprentice and supervisory edu-

cational programs. Never in the history of our railroads have we had greater need for such programs. I have already indicated the shortage of good mechanics and supervisors. What I have not yet emphasized is that the shortage in numbers and proficiency of those we now have is not the end of the story. The "old-time mechanic" even at best was not the mechanic we now need, except in respect to his loyalty and devotion to duty. He knew his stuff but the jobs he was faced with were child's play compared to the ones which his successor must know how to do.

What a far cry it is from fitting up the old strap-type back-end main rod brass, to the fitting of the main bearings on a 12-cylinder Diesel engine; from re-boring the old piston-type valve bushing to re-boring a Diesel cylinder liner; from wiring and maintaining the circuits for headlights to train control, radio and trouble-shooting on the control systems of a road Diesel-electric locomotive; from the link-and-pin to the tight-lock coupler and the rubber-set draft gear; from the steam-jam brake to the modern air-brake system; from the friction bearing to the roller bearing; from Pintsch gas lights to fluorescent electric lights; from the coal stove to air conditioning; from the hand brake to the AB brake on a freight car!

No, the knowledge and experience of the old time mechanic won't suffice. The new mechanic is going to have to be proficient in building, repairing and maintaining all of these new complicated devices so rapidly becoming standard. He must be capable of assimilating instruction and learning how to take care of even more complicated devices which are sure to be with us soon.

Where are these new mechanical wonders going to come from? Two sources. We are going to make them out of the men we now have and from the ones we are going to hire as apprentices. Neither job is impossible, but both will involve a great deal of planning and hard work. There is nothing new about either scheme—they have been demonstrated and proved many times in the past. In any railroad Diesel shop men, both young and old, will be found carrying on in an efficient manner. Ask where they learned to do these complicated modern jobs. Some were trained in schools, but most of them learned right on the job. They came from the steam roundhouse across the way, or the steam back shop at the division point. They never saw a Diesel locomotive until a year or so ago. There is real encouragement to be derived from this fact. Yes, these old timers can learn if they have the right kind of instruction and instructors. The fellow who said that you can't teach an old dog new tricks never tried it with an old-time railroad mechanic. Of

course you can't do it with all of them, but you can with sufficient numbers to hold the line until the real mass training ground—the apprentice schools—begin to function.

### First, Train the Trainers

First, we must train the trainers. Fundamentally these new-day, postwar mechanics we are going to make can't be any better than the men from whom they get their training, inspiration and incentive to do better work. Their trainers are going to be supervisors and apprentice instructors made from the higher type of men now in service. If we do this properly there won't be any question about qualified successors for them when they are promoted or for other reasons are no longer with us, for the graduate apprentices will easily be able to fill their places. If we inspire these trainers with loyalty, honesty, enthusiasm for their company and their work and the desire to bring along the apprentices on these same lines, giving them the best instruction and advice available, gradually as these apprentices become mechanics, inefficiency, disinterest and absenteeism will fade out and as it does costs will go down and equipment maintenance and operation will improve.

The first move must be to decide how many of these apprentices each of us is going to need to fill the gap. This will include in the total the loss during that past five years, and a sufficient number to fill the current losses due to mortality, resignation, retirement and promotion. Not too many—we must have a place for each graduate if we expect to hold the interest and the enthusiasm of those we are training.

### Recruit Above the Average

Then we must go out after the boys we need, not wait for them to come to us. In the first place, if we pursue the waiting course, we will get what other industries do not want—a low average of intelligence, enthusiasm and adaptability to our needs. These boys we must have are not the run-of-mine kind. They will have to be above the average in all respects. We are expecting to develop them, not just into ordinary mechanics but into engineering mechanics. It will require just that to fill the bill in the future. Certainly the man who will be able to diagnose the troubles and quickly return to service any one of five or six types of air conditioning will be more than a mechanic. The man who not only can set and adjust to proper functioning the old Walschaert, Baker and similar types of steam locomotive valve gears but also can put his fingers quickly on the trouble with a poppet valve gear is more than a

mechanic. The man who not only knows the intricacies and the workings of the old style air-brake systems but can, with equal alacrity and certainty, diagnose the trouble with and make necessary repairs to the AB brake, to the D-22-AR control valve, the load-compensating brake, the electro-pneumatic brake and the pneumatic controls on some of the new equipment is more than a mechanic. The man who not only knows the steam engine but also is an expert at testing and maintaining any or all of the present types of Diesel engines is more than a mechanic.

These same boys are going to have to be the ones to pick up a thorough working knowledge of the many new devices which will come into use during their lifetimes—electronics, the gas turbine, jet propulsion and perhaps even the atomic engine.

And what about the supervisors of such skilled men—surely they will also have to be engineering supervisors? We have neither the time nor the need to be teaching apprentice boys the three R's, spelling or even blueprint reading. They must have had those things before we get them. We must go out and select them from high schools, trade schools, colleges and universities. We must sell to the leaders of those schools the fact that we have a worthy, well compensated vocation to offer their students and enlist them on our procurement staff, which, by the way, should include our shop-craft committees and every supervisor in the mechanical department.

After hiring, the next important task is inspiring. Without inspiration even the best candidate can be ruined. Take time to talk matters over with him. Show him what his future has to offer—point out the successful men who have come up over the route he is starting on. Let him understand from the start that there is no place in the organization for the drone, the misfit or the disloyal. Let him know that there is no limit to the advancement open to him, except the limitation he places on himself by his own failure to take advantage of the training he is about to be given.

His training in the apprentice school should be thorough and as rapid as he is able to absorb it. Do not hold him back for the average man in the class. If he grasps his assignments easily and thoroughly, use him as an assistant instructor. Experience thus gained will help him, and the company may find a natural supervisor of men at this early stage. In this and other ways, reward those who merit reward and inspire not only them but the other fellow who sees that rewarding. Keep the curricula up to date. Constantly revise lessons and examples to incorporate each new development in the art. Give apprentices a chance to broaden their experience



and training whenever possible. If the air-brake or Diesel instruction car is in town, encourage them to spend all the time they can in learning everything the air or Diesel instructors can offer them.

Plan the shop work for apprentices so that each will get an appropriate time on every important phase of his craft's work. See that nothing interferes with this.

Whenever possible, give the apprentices of one craft a chance to find out about the more important operations carried out by the other crafts.

Outside of class or shop, encourage apprentice clubs, trips to power plants and other industries' shops, where this can be arranged; home study, and the use of available text books in the company libraries create incentives and establish rewards. Give these awards on some definite, well established basis to avoid any possible stigma of favoritism. Let the value of the award parallel the value of the accomplishment.

I am convinced that the top award should be a scholarship to some accredited engineering school for the apprentice or apprentices who top their group in achievement during the four years of their course. This award is even more appropriate since we are endeavoring to make "engineering mechanics" and "engineering supervisors."

When such a training program begins to infiltrate into our ranks the type of employee our future demands, in quantities adequate for our needs, the effect will be like a blood transfusion.

## Multiple Tamper

A track-mounted, self-propelled, multiple tamping machine has been announced by the Electric Tamper & Equipment Co., Ludington, Mich. Known as the Jackson Multiple Tamper, this machine is operated by one man and is equipped with eight individual, electric vibratory tampers, so arranged as to perform eight-point tamping on each individual tie. The machine is reported to be capable of finish-tamping three to five ties per minute, depending on the amount of the raise being made.

The tamping units are attached to a heavy transverse crosshead by means of cradle mountings. The crosshead is mounted on the front end of a four-wheel carriage by means of a cantilever arm arranged to move in a vertical plane. In operation, the crosshead and attached tampers are raised and lowered hydraulically, controlled by a single valve, while the machine is moved from tie to tie by the operator with the aid of a hand-wheel drive.

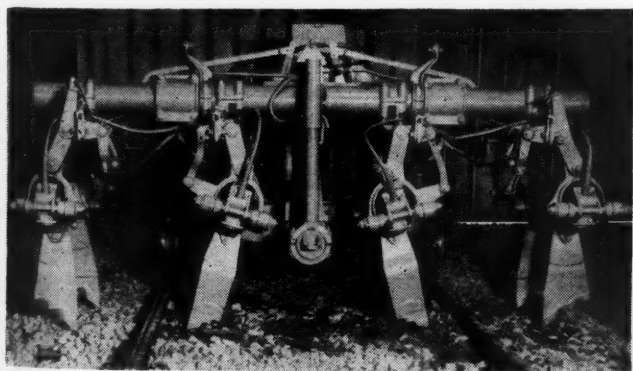
The electric tampers are mounted so that the blades of each pair of opposed tampers incline toward one another under the tie, and the mounting is also such as to permit them to be cocked under the rail as the tampers penetrate into the ballast.

Where the track raise does not exceed three inches, two insertions of the tampers into the ballast are said to be desirable. On the first of these insertions, the tampers inside the rails are

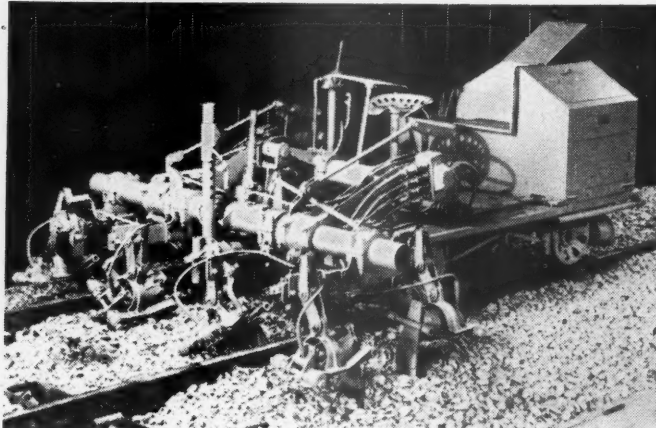
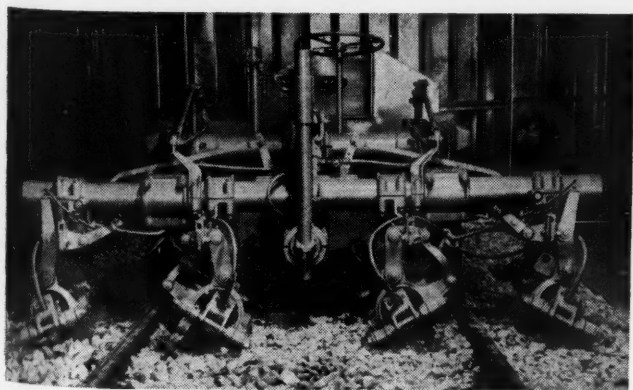
cocked to tamp under the rails while the outer units tamp the ties outside the rails. The entire tamping unit is then raised and the second insertion is made, during which all tampers are cocked to tamp under the rails. It is said that the vibratory action of the electric tampers causes each tie to be tamped to a full bearing against the rail base, squaring any slewed ties, and providing uniform compaction of the ballast material regardless of its type, without damage to the ties or ballast. Should the raise exceed three inches, a repetition of this tamping cycle is recommended. As the tamping unit is located in advance of the carriage, the weight of the machine is always supported on tamped track.

The Multiple Tamper is powered by a 20-hp. Wisconsin gasoline engine which not only drives the generator for the electric tampers, but which also operates hydraulic pumps for raising and lowering the tamping unit and propels the unit along the track when running to and from the point of work. The tampers are operated with three-phase, 110-volt, 60-cycle current, but a single-phase outlet is available for lights and electric tools. It is said that the unit, which weighs approximately 4,000 lb., may be removed from the track to a prepared set-off by three men in approximately three minutes.

A four-wheel closed body trailer is furnished as standard equipment with the Multiple Tamper. This trailer is supplied with an assortment of spare parts and tools, including two complete Jackson tampers and two spare tamper motors. Where necessary, two or four Jackson tampers may be plugged into the generator outlet to be used at switches and at special trackwork where use of the Multiple Tamper would be restricted.



Left—Front view of the Jackson Multiple Tamper, showing the tamping unit in the raised position ready for making the first insertion. Below right—General view of the Multiple Tamper with the tamping unit at the end of the first insertion. Below left—The tamping unit as it appears at the end of the second insertion



## C. A. Major Succeeds F. R. Gerard as Lehigh Valley President

**C.** A. MAJOR, vice-president and general counsel of the Lehigh Valley since December, 1944, has been elected president to succeed Felix R. Gerard, who resigned because of ill health.

Mr. Gerard, elected president in July, 1944, was born at Blairsville, Pa., on August 30, 1887. He entered railroad service in 1903 as a clerk with the Pennsylvania. In 1906 he joined the operating department as a trainman. Appointed an assistant trainmaster in 1920, he became a trainmaster six years later and was promoted to passenger trainmaster in 1927. Mr. Gerard became vice-president of the Long Island in 1928 and returned to the Pennsylvania in 1932 as superintendent of the Philadelphia division. He was made general superintendent of the Northwestern division in 1936, with headquarters in Chicago. In January, 1942, he joined the Lehigh Valley as general manager and, four months later, was elected vice-president as well. He was elected vice-president, operation and maintenance, in April, 1944, holding that office until his election to the presidency.

### Mr. Major's Career

Mr. Major was born in Otisville, N. Y. Graduated from Cornell University in 1913, he joined the Lehigh Valley three years later as an attorney. He served as an Army captain during the first world war, returning to the Lehigh Valley in 1919. Appointed successively to the offices of assistant general counsel and general solicitor, he held the latter position until his elevation to vice-president and general counsel.

The main, double-tracked line of the Lehigh Valley, which operated an average of 1,254.7 miles of road last year, extends from Jersey City, N. J., and Perth Amboy to Buffalo, N. Y., via Phillipsburg, N. J., and Wilkes-Barre, Pa., with branches to Rochester, N. Y., Elmira and Fair Haven. In addition, numerous branches reach into the Pennsylvania anthracite region.

Anthracite coal tonnage hauled by the "Black Diamond route" declined sharply after the early 1920's and reached a low point in 1932. In later years this tonnage has been fairly stable, although during the war years its relationship to total freight tonnage was much inferior to what it had been previously. Conversely, the tonnage of manufactured

and miscellaneous goods was relatively larger.

In 1946, the Lehigh Valley carried 29,364,485 tons of revenue freight, compared with 23,468,153 tons in prewar 1940. Revenue passengers carried last year totaled 2,159,392 and accounted for \$6,115,491 of the aggregate operating revenues of \$67,007,685. In 1940, there were 982,717 revenue passengers, accounting for \$2,054,090 of \$47,479,836 in total operating revenues.

Products of mines hauled by the road in 1946 totaled 15,444,795 tons, or 52.60 per cent of all revenue freight, compared with 13,237,054 tons, or 56.41 per cent, in 1940. Manufactured and miscellaneous goods carried totaled 9,983,376 tons, or 34 per cent of revenue freight, compared with 7,263,199 tons, or 30.95 per cent. Anthracite coal revenue was \$14,243,850, compared with \$13,282,788.

Practically all the anthracite handled by the Lehigh Valley is originated on the company's lines, a large part being received from the Lehigh Valley Coal Company. The latter firm, formerly owned by the road, was ordered segregated in 1920 by the United States Supreme Court, which held that the relationship violated the Sherman Antitrust law and the commodities clause of the Interstate Commerce Act. In March, 1924, the road disposed of its holdings of the entire capital stock of the coal company for \$1,212,000 in cash in addition to the proceeds from the sale of \$15,000,000 of Lehigh Valley Coal 5 per cent bonds, issued in the same year.

Other important traffic items carried by the road are cement, wheat flour, iron and steel, automobiles, trucks and fresh meats. Of the manufactures and miscellaneous tonnage, a large part is received from the road's connections. Buffalo, the western terminus, is important in this respect because at that city the Lehigh Valley receives tonnage from the west via the Great Lakes, the Chicago-Buffalo roads and the Canadian roads.

The earnings trend of the Lehigh Valley over a long period of years is like that of other roads operating in the Great Lakes region. Fixed charges in the years just preceding the war were higher than during the mid-Twenties and were largely responsible for the debt adjustment plan to reduce interest charges temporarily and to extend near maturities.

Dated August 25, 1938, the readjustment plan went into effect on March 14,



C. A. Major

1939. It was approved by the United States district court at Philadelphia, Pa., on August 7, 1940, and consummated under chapter 15 of the federal Bankruptcy act, the so-called McLaughlin act. The plan provided for (1) the extension for five years of the original maturity date of 75 per cent of each of five half-yearly interest installments (\$1,558,463 each) due November 1, 1938, to November 1, 1940, inclusive, on the road's general consolidated mortgage bonds; and (2) the extension for ten years of \$15,000,000 of Lehigh Valley Railway 4½ per cent bonds, \$10,000,000 of Lehigh Valley Terminal first mortgage 5 per cent bonds and \$8,500,000 of Pennsylvania & New York Canal & Railroad consolidated mortgage 4 per cent, 4½ per cent and 5 per cent bonds. The plan did not provide for any reduction in the principal amount of existing obligations.

### 1946 Orders and Improvements

Last year the road placed orders for 500 50-ton 40½-ft. steel box cars and 100 70-ton 65½-ft. steel gondola cars at an approximate cost of \$2,302,430, according to the annual report for 1946. Other improvements included the construction of 15 8-wheel steel cabin cars at the company's Sayre, Pa., shops and the addition of 2 gasoline-operated locomotive cranes to the maintenance of way and structures equipment. During the year, AB brakes were applied to 635 freight cars; 35 hopper cars were converted to covered cars for handling bulk commodities and 282 automobile cars were modernized. The roadbed was improved by the installation of 6,876 gross tons of new rail, 228,954 creosoted ties and 106,833 cubic yards of ballast.

C. A. Major, vice-president and general counsel of the Lehigh Valley since December, 1944, has been elected president to succeed Felix R. Gerard, who resigned because of ill health.

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# High-Volume Buying Continues

**February purchases of equipment, materials, supplies and fuel aggregated \$214,607,000—First two months' total only 5 per cent less than year total for this purpose during 1938**

CLASS I railroads spent \$214,607,000 during February and \$433,407,000 during the first two months of this year for materials, supplies, equipment and fuel, according to estimates prepared by *Railway Age*, based upon special reports received from a majority of Class I carriers. Although February buying slipped 2 per cent below the \$218,800,000 expended during January, this drop may well be attributed to the shorter work month, since daily purchases during February averaged \$8,942,000 compared with \$8,100,000 during the preceding month.

## 13,729 Freight Cars Ordered

Equipment buying continued to set the pace in February. During this month orders were placed for rolling stock valued at \$70,443,000. Added to the \$58,054,000 equipment orders placed during the preceding month, this two months' total amounts to more than was spent for equipment during each of the entire years 1939, 1938, 1935, and 1931. Included in the February equipment total were 44 Diesel-electric, 1 gas-turbine and 4 electric locomotives, costing about \$11,200,000; 37 passenger-train cars aggregating \$3,700,000; and 13,729 freight-train cars costing approximately \$55,543,000.

February purchases of fuel, materials and supplies also maintained a high level, aggregating \$144,164,000, but slipped 10 per cent below the \$160,746,000 expended for the same purpose during January. They, nevertheless, surpassed the February, 1946, total of \$109,614,000 by more than 31 per cent; topped similar purchases during the comparable month of 1945 by 22 per cent; exceeded the \$128,673,000 expended for this purpose during the corresponding month of 1944 by 12 per cent; were \$45,345,000—46 per cent—greater than similar purchases during the same month of 1943; topped the \$103,766,000 spent for fuel, materials and supplies during the second month of 1942 by 39 per cent; and exceeded by \$64,106,000—80 per cent—the \$80,058,000 spent for similar supplies during February, 1941.

Purchases of fuel, materials and supplies during the first two months of 1947 aggregated \$304,910,000, and established a new high for this period of the calendar year. It is significant

that purchases during the first two months of 1947 approximated the \$305,339,000 expended for similar supplies during the first six months of 1935 and compares with the \$305,106,000 spent for the same purpose during the first eight months of 1932. Furthermore, expenditures during the first two months of this year surpassed the \$238,781,000 spent for similar supplies during the corresponding two months of 1946 by 28 per cent; topped the \$257,319,000 expended during the similar 1944 period by 18 per cent; exceeded by \$108,360,000—55 per cent—the \$196,550,000 spent during the same months of 1943; sur-

passed the \$213,547,000 spent during the comparable months of 1942 by 43 per cent; and exceeded similar purchases during January and February, 1941, by 91 per cent.

Railway purchases of all manufactured materials, including rails and crossties, but excluding equipment and fuel, during February amounted to \$89,731,000. While they slumped 12 per cent below the \$102,404,000 spent for this purpose during the previous month, they exceeded similar purchases one year earlier by 49 per cent. The February total also surpassed the \$74,666,000 expended for similar supplies during Feb-



Delivery of materials and supplies vital to the modernization programs underway on many roads is being speeded by palletized shipment of commodities—brought about through the cooperation of manufacturers and railway procurement officers

## February Railway Purchases

Averaging \$8,942,000 each day, February purchases continued at the high level established in January. All categories maintained a strong trend, with equipment and miscellaneous materials and supplies setting the pace.

|                    |              |
|--------------------|--------------|
| Equipment *        | \$70,443,000 |
| Rails              | 7,254,000    |
| Crossties          | 6,227,000    |
| All other material | 76,250,000   |

|                          |               |
|--------------------------|---------------|
| Total from manufacturers | \$160,174,000 |
| Fuel                     | 54,433,000    |

Grand Total ..... \$214,607,000

\* Amount placed on order.

ruary, 1945, by 20 per cent; topped the \$78,632,000 spent for the same purpose during the comparable month of 1944 by a full 14 per cent; and were 57 per cent, 25 per cent and 72 per cent greater, respectively, than similar purchases during the corresponding month of 1943, 1942 and 1941.

During the first two months of 1947, the railways spent \$192,135,000 for manufactured materials, including rail and crossties, but excluding equipment and fuel, compared with \$138,124,000 during the same period last year. The total for the first two months of 1947 also surpassed the \$152,610,000 spent for similar supplies during the comparable months of 1945 by 26 per cent; topped the \$156,937,000 expended during the same period of 1944 by 22 per cent; exceeded by 67 per cent the \$115,125,000 spent during the first two months of 1943; surpassed similar expenditures during January and February, 1942, by 29 per cent; and was 84 per cent greater than the \$104,444,000 spent for similar manufactured materials during the corresponding months of 1941.

## Miscellaneous Materials

Expenditures for miscellaneous materials and supplies (excluding crossties, rail and fuel) required for the maintenance of equipment, structures and track (which, for the most part, comprise stores stocks) amounted to \$76,250,000, a drop of 12.5 per cent below the \$87,141,000 spent for similar supplies during January. Although the February total in this category fell below the January high it, nevertheless, surpassed the \$53,305,000 spent for this purpose during the comparable month one year earlier by 43 per cent; topped February (1945) purchases—\$63,245,000—by more than 20 per cent; exceeded the February (1944) total of

\$65,693,000 by 16 per cent; and were 57.5 per cent greater than the \$48,407,000 spent for similar supplies during the comparable month of 1943. Furthermore, February (1947) purchases in this category were 21 per cent greater than the \$63,148,000 expended during the corresponding month of 1942, and surpassed the \$43,400,000 spent for miscellaneous materials and supplies during February, 1941, by 76 per cent.

Purchases of miscellaneous materials and supplies (excluding crossties, rail and fuel) during the first two months of 1947, established a new peak and aggregated \$163,391,000. They were 36 per cent greater than the \$120,249,000 spent for this purpose during the same period one year earlier; topped similar 1945 purchases — \$129,854,000 — by 26 per cent; and surpassed the \$130,680,000 expended during the same two months of 1944 by 25 per cent. Moreover, purchases during the first two months of the current year were 68 per cent, 24 per cent, and 84 per cent greater, respectively, than similar purchases during the comparable months of 1943, 1942 and 1941.

Crosstie purchases during February aggregated \$6,227,000. They represented a decrease of approximately 13 per cent below the \$7,150,000 spent for ties dur-

expended for similar supplies during the corresponding period one year earlier—and topped the \$11,060,000 spent for ties during the same months of 1945 by 21 per cent. Crosstie purchases for the first two months of 1947 sagged 1.5 per cent below the \$13,570,000 expended for similar supplies during the comparable period of 1944, but surpassed the 1943 total—\$8,567,000—by 56 per cent; topped the \$9,685,000 spent for ties during the first two months of 1942 by 38 per cent; and were 94 per cent greater than the \$6,909,000 expended for similar supplies during January and February, 1941.

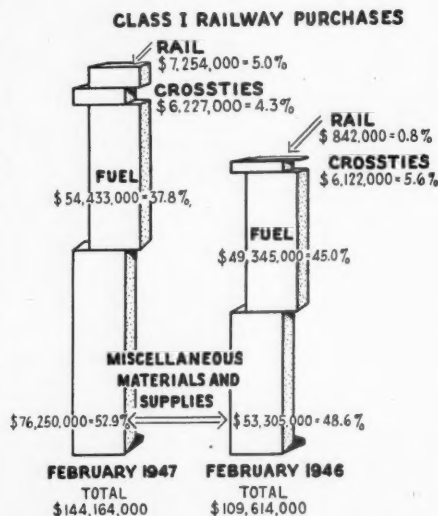
## Rail Deliveries Lower

Purchases of rail during February aggregated \$7,254,000—a drop of almost 11 per cent below the \$8,113,000 expended for rail during January. However, the February (1947) total surpassed the seven-year low—\$842,000—registered during February, 1946, by almost 762 per cent; topped the \$5,962,000 spent during the comparable month of 1945 by 22 per cent; exceeded the February (1944) total of \$6,264,000 by 16 per cent; and were 67 per cent, 90 per cent, and 37 per cent, respectively, greater than rail purchases during the comparable month of 1943, 1942 and 1941.

Deliveries of rail during January and February, 1947, aggregated \$15,367,000, compared with \$5,931,000 during the same period of 1946. They also surpassed the \$11,696,000 expended during the same two months of 1945 by 31 per cent; topped similar expenditures (\$12,687,000) during the comparable period of 1944 by 21 per cent; exceeded the \$9,151,000 spent for rail during the first two months of 1943 by 68 per cent; topped the 1942 total (\$6,884,000) by 123 per cent; and were 76 per cent greater than the \$8,748,000 spent for this purpose during the corresponding two months of 1941.

## Inventory Values at New High

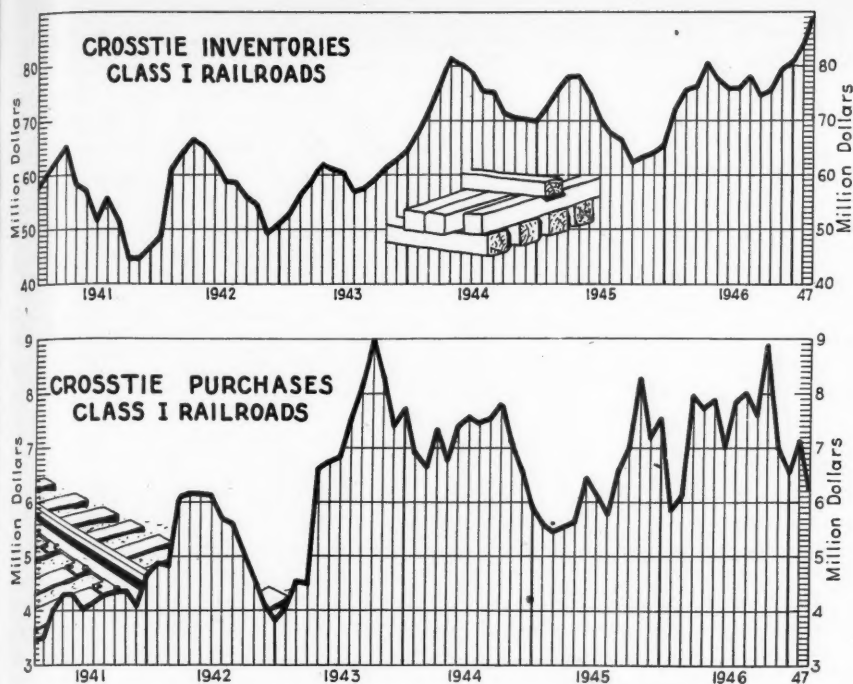
The value of all materials (including fuel and scrap) stocked by Class I railroads amounted to \$673,657,000 on February 1, 1947, according to the Interstate Commerce Commission. This total established a new 24-yr. monthly high and reflected an increase of 3 per cent compared with the January balance and 4 per cent compared with the \$650,243,000 stock on hand on December 1, 1946. Furthermore, February inventory balances exceeded those for the same day of 1946 and 1945 by 11 per cent; topped the February 1, 1944, total of \$543,262,000 by 24 per cent; were 34 per cent greater than the \$504,329,000 stock balance on the same day of 1943; surpassed the February 1, 1942, inventory — \$481,475,000 — by 40 per



ing the preceding month. However, they exceeded the \$6,122,000 expended for similar supplies during the comparable month of 1946 by 2 per cent and topped February (1945) crosstie purchases of \$5,459,000 by 14 per cent. On the other hand, they slumped 7 per cent below the \$6,675,000 spent for similar supplies during the same month of 1944. Nevertheless, with this exception, February (1947) crosstie purchases topped those of any comparable month since 1941.

During the first two months of this year the railways spent \$13,377,000 for crossties—12 per cent more than was





February crosstie inventories reached a new monthly peak—\$89,009,000—and the first two months' purchases topped those of any comparable period since 1944

cent, and topped both the February 1, 1941, and February 1, 1940, stock total by 96 per cent. Moreover, the February 1, 1946, stock balance exceeded those for the comparable day of 1939, 1938, 1937, 1936, 1935, 1934, 1933, and 1932, by 111 per cent, 76 per cent, 110 per cent, 139 per cent, 127 per cent, 129 per cent, 114 per cent, and 82 per cent, respectively.

The value of miscellaneous materials and supplies (excluding crossties, rail and fuel) stocked by Class I railroads amounted to \$487,935,000 on February 1, 1947, according to *Railway Age* estimates.

This total reflects an increase of 2 per cent over the January 1 balance and was 11 per cent greater than the \$439,184,000 supply on hand on the same day one year earlier. The February inventory also topped the \$440,353,000 stock of similar supplies on February 1, 1945, by 11 per cent; surpassed the \$387,899,000 inventory in this category on the comparable day of 1944 by 28 per cent; exceeded the February 1 (1943) stock of miscellaneous materials and supplies — \$374,097,000 — by 30 per cent; and was 41 per cent and 121 per cent greater, respectively, than similar inventories on the corresponding days of 1942 and 1941.

Crosstie inventories on February 1 amounted to \$89,009,000—a gain of 6 per cent over the new peak established during the preceding month. Furthermore, the February 1 balance surpassed the \$75,886,000 supply on hand on the same day one year earlier by 17 per cent; topped the February 1, 1945, crosstie stock — \$75,259,000 — by 18 per cent; and exceeded the \$72,039,000 tie

inventory on the comparable day of 1944 by almost 24 per cent.

Rail in stock on February 1, 1947, totaled \$30,920,000—the highest point reached on this day of any year since 1937. The February (1947) rail supply constituted 5 per cent of the total inventory, compared with 4 per cent on the same day of 1946. It is significant also that the 1947 rail balance topped the \$22,439,000 balance on February 1, 1946, by 38 per cent; surpassed the February 1, 1945, balance — \$25,149,000 — by 23 per cent; and was 27 per cent, 58 per cent, 36 per cent, and 16 per cent greater, respectively, than rail balances on the corresponding days of 1944, 1943, 1942, and 1941.

Although the February 1 (1947) fuel stock was 5 per cent more than the January 1 (1947) balance and 6 per cent more than the December 1 (1946) balance it sagged almost 6 per cent below the February 1 (1946) fuel stock, and was 7 per cent less than fuel supplies on the comparable day of 1945. However, the February (1947) fuel stock of \$52,603,000 topped the \$49,056,000 on hand on the same day of 1944 by a full 7 per cent; surpassed the February 1 (1943) fuel stock of \$43,654,000 by 20 per cent; exceeded similar stocks on the corresponding day of 1942 by 30 per cent; and was 114 per cent greater than the \$24,591,000 fuel stock on February 1, 1941.

For every dollar of materials, supplies and fuel carried in stock by the Class I railroads during the years 1936-1947, scrap inventories ranged from 1.6 to 3.4 cents.

Ratio of Monthly Scrap Inventories to Total Inventories

| February  | Scrap Inventories (000) | Total Inventories (000) | Ratio |
|-----------|-------------------------|-------------------------|-------|
| 1947..... | \$13,190                | \$673,657               | 0.020 |
| 1946..... | 11,677                  | 604,799                 | 0.019 |
| 1945..... | 10,021                  | 607,180                 | 0.016 |
| 1944..... | 9,937                   | 543,262                 | 0.018 |
| 1943..... | 10,408                  | 504,329                 | 0.021 |
| 1942..... | 10,941                  | 481,475                 | 0.023 |
| 1941..... | 10,728                  | 343,117                 | 0.031 |
| 1940..... | 11,862                  | 342,843                 | 0.034 |
| 1939..... | 10,393                  | 318,804                 | 0.033 |
| 1938..... | 11,634                  | 383,388                 | 0.030 |
| 1937..... | 8,899                   | 320,361                 | 0.028 |
| 1936..... | 7,511                   | 281,790                 | 0.027 |

Scrap inventories on February 1 amounted to \$13,190,000—an increase of 8 per cent over the January 1 total—and were 13 per cent more than the February 1 (1946) balance, which aggregated \$11,677,000. Although scrap inventories reached a new February 1 high, the ratio between scrap inventories and total inventories, as will be seen in the table, have not reached an abnormal level compared with other years.

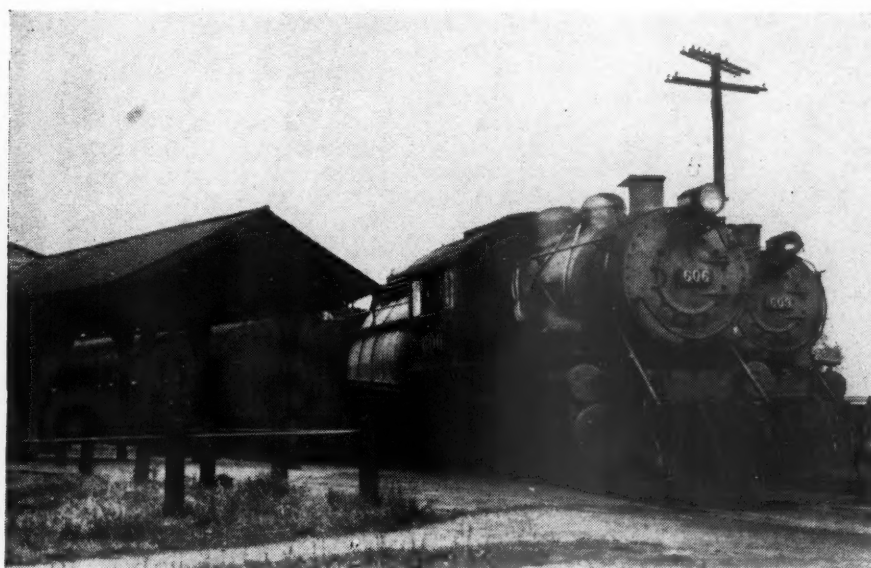


Photo courtesy of W. A. Lucas  
A pair of "Camelbacks" on the Reading at Newtown, Pa.

Inspired by achievements  
of past, plans are made  
for more intense and  
comprehensive program



Above—Gustav Metzman, New York Central president, with the A. A. R. poster in the background. Below—Left to right: Hon. Warren R. Austin, U. S. representative to United Nations; Judge R. V. Fletcher, and R. J. Bowman, president of the C. & O. and Pere Marquette



## Railroad Its

**T**HE Transportation Department of the National Council of the Y. M. C. A., more familiarly known as the Railroad Y. M. C. A., celebrated the seventy-fifth anniversary of its founding in Cleveland, Ohio, on April 24-26. With a brief review of the past, and taking of stock as of today, the greater part of the conference was concentrated on plans for advance all along the line during the next quarter century. Several commissions, after much study and experiment, made positive recommendations as to administration and program, and these were further supplemented by findings of a number of "work" groups, which functioned intensively during the meeting.

These activities were enhanced by inspiring addresses from several outstanding leaders, including President R. J. Bowman of the Chesapeake & Ohio and Pere Marquette, who was also chairman of the sponsoring committee for the conference; President Gustav Metzman of the New York Central, on whose system (the old Lake Shore & Michigan Southern) the Railroad "Y" originated; President David B. Robertson of the Brotherhood of Locomotive Firemen and Enginemen; Honorable Warren R. Austin, representative of the United

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Judge R. V. Fletcher, presiding, with Hon. Warren R. Austin, guest of honor

## Y. M. C. A. Commemorates Seventy-Fifth Anniversary

States to the United Nations; and Dr. Eugene E. Barnett, general secretary of the National Council and International Committee of the Y. M. C. A.

Judge R. V. Fletcher, of the Association of American Railroads, was elected conference chairman and was assisted by the following vice-chairmen: R. E. Woodruff, president, Erie; Fred N. Aten, president, Railway Employees Department, American Federation of Labor; and H. D. Brydone-Jack, manager, department of personnel, Canadian Pacific. There were 235 registered delegates, more than half of them being laymen; the total attendance, including visitors and members of families, was 526.

After the preliminaries at the opening session of the conference, G. K. Roper, senior secretary, Transportation Department, Y. M. C. A., outlined the purpose of the conference and particularly stressed the importance of planning for an intensification of the work, as well as extending it into unoccupied fields.

Some idea of the present status of the 180 Railroad Y. M. C. A.'s may be gained from the results of the 1946 Continental Membership Campaign, which were reported upon by David B.

Robertson, and which showed a total membership of more than 125,000. Many more than this, of course, including the members of families, share the benefits of these associations. John B. Parrish, chairman of the Transportation Committee of the United States, pointed out, for instance, that during 1946 over five million people participated in social,

recreational, physical, devotional and educational group activities. Nearly four million, away from their homes, were provided with comfortable beds; more than 14 million meals were served, and 18,746 visits were made to the ill and bedridden by laymen and secretaries. The total budget of the Transportation Department during 1946 was in the neighborhood of 8¼ million dollars, and 15,000 laymen functioned on local and national boards.

R. J. Bowman, in opening the Conference and welcoming it to Cleveland, paid this tribute to the Railroad "Y":

"The Chesapeake & Ohio has been engaged in a cooperative enterprise with the Railroad Y. M. C. A. for at least 57 years—Y. M. C. A. buildings having been erected at Gladstone and Clifton Forge, Va., in 1890. The C. & O. provided the entire cost for erecting these buildings, and also for the erection of Y. M. C. A. buildings at Handley, Cane Fork and Peach Creek, W. Va., and Lexington, Ky. Our railroad also contributed substantially to the erection of Y. M. C. A. buildings at five other points along our line, and assists with the operating costs of all of the twelve Y. M. C. A.'s which serve our people. It seems to me you will agree that this



D. B. Robertson, Brotherhood of Locomotive Firemen and Enginemen president, addresses the conference

is a very strong indication of the high esteem in which we hold the work of the Railroad Y. M. C. A.

"That our people are very highly Y. M. C. A.-minded is evidenced by the fact that 11,328 employees held membership in the twelve institutions on our road during the year 1945. This was the third largest membership of any single railroad group of employees in the United States and Canada, and was by far the highest percentage of membership, based on the total number of employees, of any of the 48 railroads whose lines are served by the Railroad Y. M. C. A.

"I believe the best evidence I can lay before you of the great value we of the C. & O. place upon the splendid work being carried on by the Railroad Y. M. C. A. on our property, and the continued cooperation which we feel we can count upon in the future, is the recent authorization granted by our board of directors for the construction of a new three-story Y. M. C. A. building at Russell, Ky., near Ashland, where our largest marshalling and distribution yards are located, at an estimated cost of approximately \$600,000. We have in mind progressive steps for improvements to Y. M. C. A. facilities at other points to serve our men."

### Preservation of Free Enterprise

President Metzman of the New York Central, emphasized the vital and strategic importance of the railroads in both peace and war. "They are the backbone of the American transportation system. They do not seek preferential treatment. They ask only for an opportunity to perform their work on equal terms with those of other agencies in the United States, with justice to all and favor to none. Special treatment for others can result only in impairing the financial strength and economic usefulness of the railroads."

"The future of America's free enterprise system rests on maximum production, good wages, fair prices, and fair profits. These form the keystone of America's economic security. Delivering America's natural resources and industrial production is a task that now more than ever calls for financially healthy railroads. For production and distribution is the fundamental task of retaining our industrial world leadership.

"Twice in our lifetime, America's right to freedom and the leadership that freedom created has been challenged by autocratic or dictatorial forces abroad. Twice America has had to defend its right in bitter arms. And in both those wars, the organization of the Y. M. C. A. has stood shoulder to shoulder with America's fighting men at home and abroad.

"Today, the battle continues on a new battleground. It is here at home. It is here in the fight our own railroad industry must make for its right to survive and progress on the basis of its service to the nation. It is here in the struggle to perfect the American free industrial system, so that we as a nation can retain our leadership as a successful example and as a productive power to serve a world in need."

### The Value of the "Y"

In prefacing his address, President Metzman paid a high tribute to the Railroad Y. M. C. A. in these words:

"I know of no other organization which from its inception has continued year in and year out to have a more wholesome influence upon the lives of our railroad people and has contributed more to our general welfare than have the Railroad Branches of the Young Men's Christian Association. By helping us to be better men, the Y also helps us to be better railroad employees. And better railroad employees make better railroads.

The value of the Y contribution in promoting the welfare of railroad employees was never better demonstrated than during the war period, when by necessity families were dislocated and the Railroad Y became more than ever the "home away from home" for thousands of men. And to thousands of others throughout the country the Y continues to be an integral part of their daily lives. In promoting educational, religious, social, physical and recreational activities, the Y adds to contentment in their jobs. Indeed, a full, wholesome life depends not alone upon happiness in our working hours but also upon constructive use of our leisure hours. This is one of the most important functions of the Railroad Y. And its expanding influence extends beyond the privilege of individual membership; it reaches into the very heart of family and community life.

"In the establishment of these "homes away from home," the New York Central System has a deep sense of justifiable pride. It was in the year 1870 that a group of railroad men on the old Lake Shore & Michigan Southern Railway (one of the predecessor companies of the New York Central), at the suggestion and under the leadership of George Meyers, Cleveland stationmaster, established a weekly prayer meeting in his office. The following year Cleveland pastors preached sermons to railroad men and their families in the station. And in 1872, at the request of the men themselves, the first railroad branch of the Y. M. C. A. was organized. General John H. Devereux, then general manager of the Lake Shore & Michigan

Southern, Reuben F. Smith, of the Cleveland & Pittsburgh Railroad (now part of the Pennsylvania Railroad) and Oscar Townsend of the Big Four, were chosen directors of this railroad branch. But much of the early success of the branch was due to the earnest zeal and enthusiasm of Henry W. Stager, a train dispatcher of the Lake Shore Road at Cleveland.

"Fully recognizing the value of this partnership with the Y, the railroads gave it their wholehearted support. Succeeding years have proved that this was one of the most constructive and far-reaching steps which has ever been taken by any industry for the advancement of the well-being of its employees. We have only to look upon its record of accomplishments over the past 75 years to realize the importance of the Y work. From its modest beginning three-quarters of a century ago, it has grown to an organization having 180 points of service throughout the United States and Canada, reaching approximately 375,000 railroad employees and their families, and having an annual budget of approximately eight million dollars. Such a record gives indisputable proof of the value of its services.

"On the New York Central System alone, there are 21 branches and over 16,000 members, the second highest membership of any railroad in the country, and our company contributes a substantial amount annually to the maintenance and upkeep of those branches. I wish all our investments brought in as high a rate of return as does our contribution to the Railroad Y.

"It is our fervent desire to do everything in our power to promote the Railroad Branches as a living, pulsating force in the daily lives of our employees and the railroad industry at large. For there has never been a time in history when religious principles and moral values have been so challenged as they are being challenged today. And there has never been a time in history when the need for an organization like the Y. M. C. A. was more urgent than it is today. As General Eisenhower has said, 'the only hope for abiding peace is the moral and spiritual regeneration of all mankind'."

### Robertson Commends the "Y"

Before making his formal address on "Government — Management — Labor Relationships—A Crisis," D. B. Robertson referred to the Railroad Y in these terms:

"This seventy-fifth anniversary of the Transportation Department of the Y. M. C. A. provides a welcome opportunity to express the gratitude of the railroad workers on the North American continent for the numberless services



and comforts received from the Railroad Y. I welcome this opportunity, not only on behalf of the membership of my own organization but on behalf of all of the railroad brotherhoods who have availed themselves of the good things provided by the Y. M. C. A.

"I am without words to tell you how deeply thankful we are. Our appreciation is an enduring thing, for the work of the Y is not of the past but of the present and the future.

"It was a great pleasure for me to bring before this conference a membership report which disclosed a gain of approximately 19,000 members during the years 1940 through 1946. In respect to membership, the Railroad Y often reminds me of our own Ladies' Organization. I have often told them, that they are either going into or just coming out of a membership campaign. That is the way it should be and must be, if this great work is to endure. Our own Ladies' Organization began the growth which brought it to strength, when it undertook to fill the gap of loneliness and hardship that marked the life of the operating railroader at away-from-home terminals. It was in 1884 that wives of our members at Tucson, Ariz., made possible a new degree of comfort and rest for railroad workers at division points where the Railroad Y was not yet established.

"I recall, and without pleasure, how many times I spent a miserable night away from home, trying to get some sleep and rest in the cramped and inadequate quarters of a caboose, which already was crowded by members of the train crew. I can personally testify to the great contribution that the Y. M. C. A. has made to the comfort, convenience, and health of the railroad worker and I wish to assure you that the work of the Y. M. C. A. is one that we cherish and are determined to make ever greater through our participation."

### Deprecates Hysteria

Mr. Robertson discussed the danger of Communism at some length, and particularly warned against its infiltration into the American labor movement. He deprecated hysteria in proposed labor legislation, pointing out that many of our serious national difficulties and emergencies during recent years have been caused by the imposition of war controls. We must return the control of labor-management relationships to private industrial processes. He closed his address with this comment: "At this critical point in the prevailing situation, both at home and abroad, this problem must have the most cautious scrutiny, without hasty action, if we are to have a sensible and constructive answer."

Because the Y. M. C. A. has so great an international interest and outlook, Warren R. Austin, United States representative to the United Nations, chose the meeting at Cleveland as a platform from which to make a world-wide appeal for collective security.

### Pioneering for Peace

Speaking on "Pioneering for Peace," he listed the following as some of the policies the United States must pursue in relation to the United Nations, in order to attain this goal:

1. We must make clear that we are ready at all times to support the law of the Charter—by force if necessary—in accordance with our obligations.

2. We must use to the full and with patience, all the processes of conciliation and organized cooperation established by the United Nations. We must seek constantly for better understanding with all our allies. Whatever others do, we must seek always to avoid hysteria and recrimination. We do not need to fear anybody. We must seek by our policies to remove fear in others and replace it by confidence.

3. We must maintain our own economic strength, and help restore economic strength to those parts of the world left weakened by the war, and, therefore, an easy prey to some future aggressor. This means a businesslike investment of American capital, a firm adherence to the policy of reducing barriers to an expanding world trade and, for this year at least, continued direct relief to some countries. An enlightened economic foreign policy will increase prosperity in the United States as much as in any other country. Collective security can never be realized without such a policy on our part.

4. We must maintain our military establishment, not for purposes of domination but in order to be able to back up our commitments in support of collective security under the United Nations. This means that we must not engage in any unilateral disarmament by hasty and ill-considered reductions in our armed forces or in our budget for national defense. It also means establishment of a universal military training system that would provide the necessary reserves of skilled manpower trained in the complicated techniques of modern warfare. If we were ever called upon to join in collective action against a major aggressor, we would not have the two years of grace we were given in the last war. We should have to act with decisive force at once and with men already trained. Peacetime universal military training in the United States is not in conflict with the ultimate goal of world disarmament.

5. We must stand firm in support of

an effective and enforceable system of international control of atomic energy and of other major weapons adaptable to mass destruction. We must keep trying with patience and firmness to reach agreement with the Soviet Union on this matter. I believe that sooner or later we will reach agreement. It is just as much in the vital interest of the Soviet Union as it is of ourselves to establish a system of control that would fully safeguard complying states from the hazards of violations and evasions. Such a system would require greater delegations of national sovereignty to international authority than either of our nations has previously been willing to give. But without such a system neither one of us would in the long run be able to safeguard our independence or our respective ways of life from the destructiveness of another war.

6. We must apply comparable principles of effective international control to the so-called conventional armaments and armed forces, so that they, too, can be reduced in such a way as to safeguard all states against violations and evasions.

7. We must press for completion of the special agreements called for by the Charter that would provide the Security Council with peace forces to enforce its decisions.

8. We must lend our full support to the development and application of international law, particularly the laws against war which have been for the first time enforced against individuals by the Nuremberg and Far Eastern tribunals. The increasing application of international law directly to individuals is of importance to the prevalence of peace.

### Commission and Other Reports

In addition to the membership report, made by D. B. Robertson, which has already been mentioned, there were reports and recommendations from the following commissions: Organization, Relationships and Budget, J. B. Parrish, chairman, vice-president, Chesapeake & Ohio; Personnel, D. P. Loomis, chairman, executive director, Association of Western Railroads; Program Advance and Religious Work, A. O. Herman, chairman, assistant to general manager, Baltimore & Ohio; and Responsible Citizenship, Roy V. Wright, chairman, managing editor, *Railway Age*.

Friday afternoon was devoted to intense effort on the part of six discussion or "work" groups and the recommendations of these groups were presented to the conference on Saturday morning. The subjects covered personnel; the extension of the work to other forms of transportation; the expansion of the

(Continued on page 899)

# Diesel Power for Cabooses

**T**RAIN communication equipment will apparently find wide use, but railroad officers are at present confronted with the need for selection of a dependable and economical source of power to operate the apparatus on the caboose. The three methods that have received the most consideration are Diesel electric generator sets, axle-driven generators with batteries, and propane engine-driven generator sets.

Preliminary trial installations have developed a number of advantages to be realized from the adoption of Diesel electric generator sets. Compact and economical, the small Diesel engine that drives this type of generator set will produce power continuously under nearly every condition. It operates on Diesel locomotive fuel and lubricating oil, and can be serviced by the same mechanics as for Diesel locomotives, although most small engines of this type do not require specialized mechanics for proper servicing. In comparison with gasoline engines, the economy of the Diesel is undisputed. The fuel consumed by a Diesel is approximately one-half the amount required by a gasoline engine in developing the same horsepower.

**By GLENN R. MERZ**

*Witte Engine Works  
Division of Oil Well Supply Company  
U. S. Steel Corporation Subsidiary  
Kansas City, Mo.*

Danger of fire or explosion is eliminated through the use of Diesel-operated generator sets as their fuel is non-explosive. The small Diesel set is often equipped with a fuel tank of about 30 gallons capacity, while gasoline engine sets require bulky tanks of about twice that capacity. An additional Diesel advantage is its medium speed and continuous heavy duty capacity as contrasted against the high speed engines. Many Diesels have a record of having operated for over 10,000 hours without repairs.

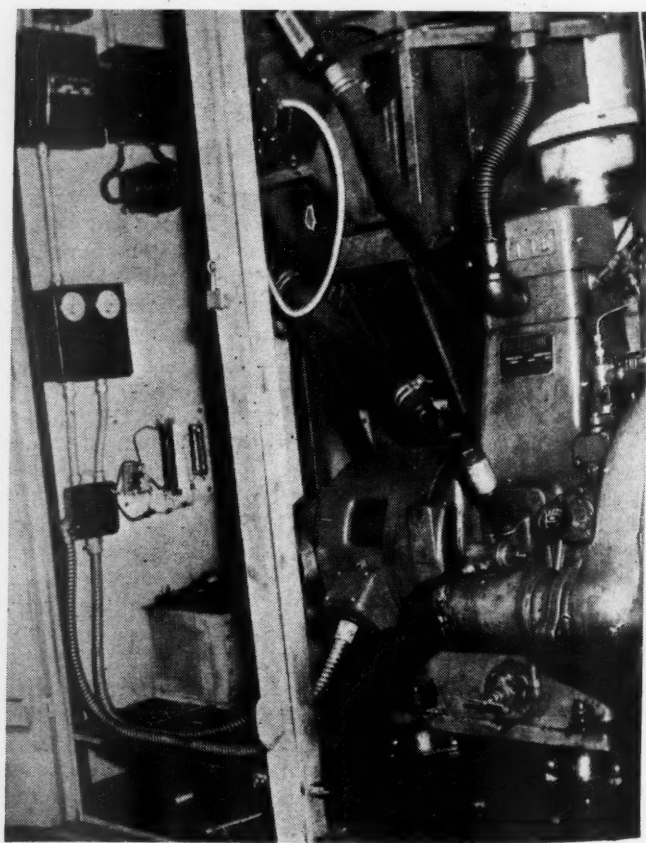
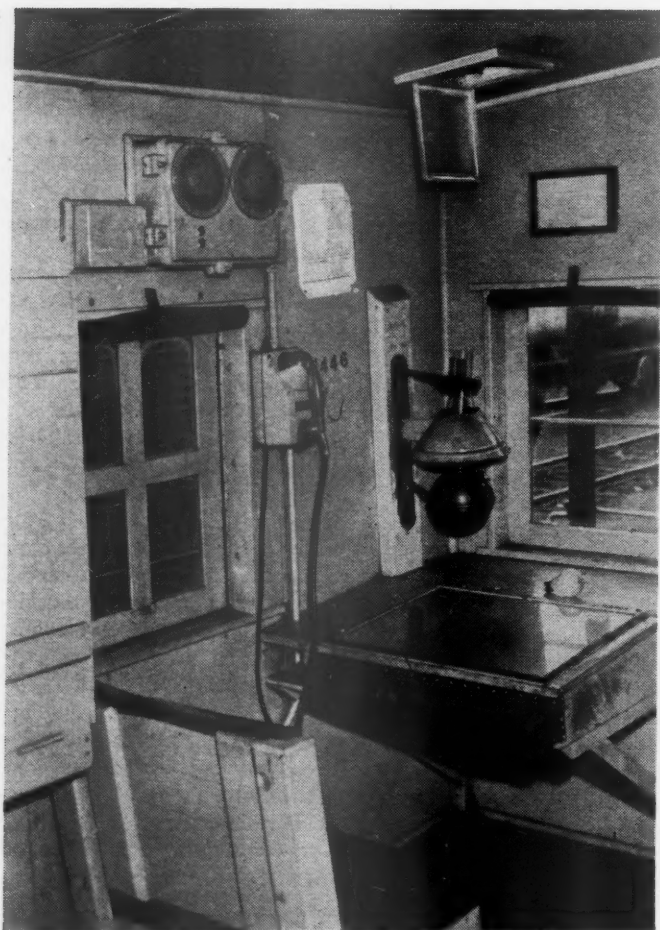
Apparently most economical from the standpoint of operation, but unsatisfactory in the results attained on cabooses, is the axle-driven generator. The axle generator eliminates fuel costs and danger from fire or explosion, but produces power only when the train travels above a prescribed speed. Volt-

age regulation is necessary since train speeds are not constant. Batteries, which may be damaged by freezing or sudden shock, are required for use when the train is not moving.

Through the cooperation of the Denver & Rio Grande Western and the Witte Engine Division of Oil Well Supply Company, a subsidiary of United States Steel Corporation, a trial installation was made of a 2.5-kw., 110-volt, 60-cycle, alternating-current Witte "Dieselectric" set. The engine is installed in a caboose and enclosed in a sound-proof cabinet. It is mounted on steel-reinforced rubber vibration dampeners, which isolate the engine vibrations from the car. An ingenious water-cooling system is used to assure proper engine cooling whether the train is moving in either direction or standing still. It employs a wall-type radiator, thermostatically controlled, with an electric motor-driven fan, mounted in a window of the caboose. Another opening, about 18 in. square, is provided for air intake. This arrangement was found to be necessary to meet the conditions of varying altitudes and temperatures. With this method of cooling it is also possible to heat the caboose by baffling the air from the radiator into the caboose.

The generator is driven by a single-cylinder, four-cycle, full Diesel engine

Left—Interior of caboose showing hand set, loudspeakers, and the electric conductor's lamp, with cover open, in the ceiling. Below—The 2½-kw. engine-generator set installed in a D. & R. G. W. caboose





rated 4 hp. at 1,200 r.p.m. The engine is equipped with an electric starter and may be provided with remote push-button start-and-stop control, should it be desired. All wearing parts are replaceable. The 30-gallon tank mounted underneath the floor contains enough oil to operate the engine at full load for approximately 120 hours.

From February through October, 1946, the set operated in excess of 6,000 total hours, and according to railroad representatives it has given reliable service under heavy-duty conditions, including wide variations in temperature and altitude. Similar installations are on test with other railroads and have to date proved to be an efficient means of providing electric power for caboose radio equipment and electric lights.

## COMMUNICATIONS . . .

### A. R. E. A. Seeks Young Engineers in Its Ranks

TO THE EDITOR:

CHICAGO

The editorial in your issue of March 22, bearing the title, For "Brass Hats" Only? laments the fact that few young men participate in the work of the committees of the American Railway Engineering Association. There can be no argument regarding the facts. There are few young men on the rolls of the committees, but that condition cannot be explained by any reluctance to include them in the committee personnel. Actually, as pointed out clearly in the editorial, the Committee on Personnel of Committees is keenly aware of the need for younger blood in the committee organizations and is anxious to recruit young men.

To be profitable to the individual and to his employers, as well as to the association, a committee membership must be an active one. Unless the member attends the meetings with reasonable regularity his identity with the committee will represent little more than an empty honor. Whether he can do so depends on the attitude of his immediate superior and/or the policy of the department or the top management.

In deciding whether a man should be authorized or encouraged to take an active part in committee work his chief will be influenced to no small degree by the extent to which the railroad will benefit by the appointment, and there is no denying that the decision will be influenced by the experience and knowledge of the subject possessed by the individual under consideration, as well as by his standing and authority on his own road. It is recognized also that to single out this or that young man for service on an A.R.E.A. committee may impose some awkward problems of personnel.

Also, from the standpoint of the association, it must be recognized that broad experience in the subject under considera-

tion on the part of the committee members is an important asset. However, in spite of this, the association is anxious to include young men in the personnel of its committees, and I am confident that there is a growing realization on the part of railway managements of the educational advantages to be gained by young engineers from committee work.

WALTER S. LACHER

Secretary  
A. R. E. A.

### Doubts Stockholder's Control of Management

NEW YORK

TO THE EDITOR:

I have the highest regard for Judge R. V. Fletcher but, from a railroad experience of over half a century, from rodman to president, I can hardly go along in the statement attributed to him in your issue of March 29, which reads: "No one can deny that solvent railroads, as in the case with any other solvent business, are controlled by their stockholders, who elect the directors who in turn elect the officers."

I have lived in the vicinity of Wall Street. I have friends among the bankers. I know that they are just as good as the next man, and I think the present method of selecting directors produces results as good as any other, but I doubt the wisdom of such statements as the one above quoted. To suppose that the stockholders have anything to do, except mechanically, with the selection of directors is naive. A railroad man should be the last person in the world to believe that any good can be accomplished without concerted direction, and who is to direct the stockholders?

I am sorry to have to use a *nom de plume* but let us be

REALISTIC

### Would "Sell" Railroads to New Generation

MOUNT DORA, FLA.

TO THE EDITOR:

The private automobile, the bus and the airplane are daily carrying thousands of passengers who formerly rode the passenger trains. However, for comfort, safety and reliability no fair-minded person can deny that the modern railway train is vastly superior to these new travel agencies.

As important as the riders of auto, bus and plane may be to the railroads, they do not fill the whole sky. A new generation is growing up, soon to be reckoned with as prospective passengers for the four transportation agencies. If these youths could be made confirmed railroad enthusiasts, they in turn would be the sires of still greater armies who would class the railroads as Number One among them all. And to the very great advantage of the railroads.

One thing that will do more to create good will for the railroads than all the

rest is books and magazines dealing with railroad equipment, operation and personnel, written and edited by those who "know their railroads." Railway and locomotive operation is one of the most highly specialized callings in the world. It is not one to be written of by the fan or enthusiast with no actual operating experience or first hand knowledge of the subject.

What to do about it? Simplicity itself. Start a magazine, financed by the large railway systems, on slick paper, with high grade illustrations and edited by men with actual railroad operating experience, men who have worked with grimy hands; who know the smell of hot valve oil and soft coal smoke. Have the men on the "firing line," engineers, firemen, conductors, brakemen and others, send in true stories of actual occurrences in service, to be rewritten in good literary style by some staff writer who has himself had actual experience. Such stories by men who were there "when it happened," would give the reader a true picture of what life on a railroad really is. Fiction with a true railroad flavor could also be used.

Such a publication would create more good will for the railroads among the youth of the country, and "grownup youth" too, than any possible amount of advertising in whatever medium. It would give the coming generation a new conception of railroad life, its glamor and its compensations. It would in no degree be an expense to the railroads. It would be a real money maker and would attract much outside advertising.

FRED M. WESCOTT

### Y. M. C. A. Anniversary

(Continued from page 897)

present work to meet additional community and other needs and into unoccupied fields in this country, Canada, Alaska and Hawaii, together with a closer coordination with the Mexican Y. M. C. A.; financing the work in the years ahead; religious work and responsible citizenship; and the program, content and purpose in the areas of social, recreational and cultural activities. The enthusiasm with which these commission and work reports were received augurs well for the speeding up and extension of the movement.

The work of the conference was summed up by Jay A. Urice, executive secretary, National Board, National Council of the Y. M. C. A., and it was closed with an address by Dr. Eugene E. Barnett, presenting a challenging picture of the work of the Y throughout the world. Dr. Bernard C. Clausen, pastor of the Euclid Avenue Baptist Church of Cleveland, was the conference pastor. George Campbell led the group singing and special music was rendered by the C. & O. quartette from Richmond, Va.

# Atkinson and Pitcairn Assume New Wabash Positions



A. K. Atkinson

**T**HE election on April 17 of Arthur K. Atkinson as president of the Wabash and Norman B. Pitcairn as chairman of its board of directors (announced in the *Railway Age* of April 19, page 808) brings to that road's top executive positions two men whose combined leadership during the past five years has been featured by intensive improvement of the property and 30 per cent decrease in its debt. Mr. Pitcairn, former president, fills a position newly-created at his request so that he might be relieved of the direct responsibility for operation of the railroad. He is 65 years old.

Mr. Atkinson, 55, advances from the position of vice-president—finance and accounting, which he had held since May, 1942. In his former position he took a leading part in formulating and carrying to a successful conclusion the road's plan of reorganization which was consummated on January 1, 1942. Previous to his last-held post, Mr. Atkinson had served as treasurer for the receivers and chief financial and accounting officer.

The Wabash operates approximately 2,393 mi. of line extending from Kansas City, Mo., Omaha, Neb., Des Moines, Iowa, and St. Louis, Mo., on the west, to Chicago, Toledo, Ohio, and Buffalo, N. Y. (by trackage rights over the Canadian National between Detroit, Mich., and Buffalo) on the east.

Approximately 70 per cent of the road's tonnage is received from connections. Further, due to its extensive

coverage of the mid-continent region, the road serves as a "bridge" for a large proportion of this traffic.

Approximately 93 per cent of the Wabash's freight tonnage and 87 per cent of its freight revenue are derived from the following classifications: products of agriculture, 20 per cent of the tonnage and 19 per cent of the revenue; products of mines, 31 per cent and 11 per cent, respectively; and manufactures and miscellaneous, 42 per cent of the tonnage and 57 per cent of the revenue. In general, the traffic is exceedingly well diversified.

An excellent financial record has been maintained by the Wabash from its reorganization in 1942 to December 31, 1946, the date of its latest annual report, in comparison with the record of the old company. During this period its outstanding debt has been reduced by \$30,282,468, or approximately 30 per cent. Also during this interval the railroad enjoyed a reduction of \$1,410,938 in its annual charges.

During 1946 the Wabash moved the greatest volume of revenue traffic in any peacetime year, but, due principally to wage increases, its net income of \$4,127,211 was less than 1945's income of \$5,966,723. An increase of \$6,141,552 in operating expenses was offset to the extent of \$5,010,235 for accelerated amortization of defense projects charged to operating expenses in 1945.

## The New President

Mr. Atkinson was born on October 19, 1891, at Denver, Colo., and entered railroad service in 1909 with the Denver & Rio Grande (now the Denver & Rio Grande Western) as an office boy in the office of the general auditor. He subsequently held various clerical positions in the offices of the auditor of disbursements and the general auditor, later serving as statistician, general bookkeeper, traveling accountant and special accountant. From 1920 to 1922, he was associated with the United States Railroad Administration successively as field accountant, supervising accountant and assistant controller. In 1922 he joined the Wabash as assistant auditor, advancing later to assistant controller and assistant to vice-president, finance and accounting. From 1930 to 1942 he was vice-president, secretary and treasurer and a director of the Wabash Railway Company, the predecessor of the present company. In 1931 he was appointed, in addition, treasurer for the receivers, and



Norman B. Pitcairn

in 1941 chief financial and accounting officer. On May 15, 1942, after the reorganization, he became vice-president, finance and accounting.

Mr. Pitcairn was appointed co-receiver of the Wabash on October 19, 1933, after serving two years as president of the Detroit, Toledo & Ironton. It was in this latter position, during a period of drastic decline in revenue, that he was afforded experience which proved of value to him in the operations of the Wabash during its receivership.

Born at Harrisburg, Pa., on November 8, 1881, he received his civil engineer's degree from Princeton University in 1903. He entered railway service on June 29, 1901, as a rodman on the Pennsylvania and was promoted to transitman in 1904 and to assistant supervisor of track in 1905. Five years later he was further promoted to supervisor of track and on November 10, 1919, he was appointed division engineer on the Pittsburgh division, from which he was transferred to the Middle division in the following year, and then to the New York division in July, 1922. In October, 1923, Mr. Pitcairn was promoted to superintendent of the Erie & Ashtabula division and later served in the same capacity on the Middle and the New York divisions. In July, 1928, he became general superintendent of the Eastern Ohio division, which position he held until January, 1931, when he was elected president of the D. T. & I., with headquarters at Dearborn, Mich. He resigned from this position to become co-receiver of the Wabash. At the same time he was elected receiver and president of the Ann Arbor and president of the New Jersey, Indiana & Illinois, both Wabash subsidiaries. He was also elected a director of the Lehigh Valley.



# GENERAL NEWS

## Kendall Calls for Closer Teamwork

Says it will go a "long way" toward getting maximum usage out of cars

Asserting that "there never was a time when more was required from too little," Chairman Warren C. Kendall of the Car Service Division, Association of American Railroads, has called again for that "co-ordinated teamwork" which will "go a long way toward getting more nearly the maximum usage from the present ownership of freight cars." Mr. Kendall's call came in his latest monthly review of the "National Transportation Situation," which also included his prediction that "it will be some months yet before new cars are received from the car builders in the volume needed."

"The continued help of everyone is required," the C. S. D. chairman said. "A car day saved means that a car is made available one day earlier for another load." More specifically, he set out "car handling principles" as follows:

Renew the emphasis for highest degree Car Service Rules' observance which means a daily studied effort to load the cars available to, or substantially in the direction of, the owner.

Unload and load promptly. Load in accordance with ODT 18-A, thereby having 5 cars do the job that 6 did in prewar days.

Please see that good box cars are not loaded with contaminating commodities and that cars are not damaged, thereby requiring a trip to the repair tracks, with a consequent loss of 4 or 5 days.

**First Quarter Record** — Meanwhile, Mr. Kendall had emphasized the heavy volume of 1946 traffic by reviewing the figures for the first quarter. During that period, as he put it, the railroads carried: More grain and grain products than in any first quarter of which C. S. D. has records; more carloads of coal and of forest products than in any corresponding period since 1929; and more miscellaneous carloads than in any corresponding period since 1919, with the exception of 1944 and 1945 which were the peak traffic years of the war.

With respect to shipper complaints of "sluggish movements," Mr. Kendall accepted them as "factual." "On the other hand," he continued, "the railroad plant, with a decrease in its ownership of railroad owned freight cars to the extent of 18,200 compared with 1946 and about 31,000 compared with 1945, supplied equipment for more cars of loaded traffic during the first quarter of 1947 than any first quarter since 1930. There is no attempt to minimize the reported sluggish movements, but surely the great bulk of cars must have been moved with reasonable dispatch."

**No Early Relief**—Coming to his con-

## "A Declaration of Interdependence"

We of Labor believe that the basis of America's economy should be private enterprise, with private business and industry and agriculture operating as the primary means for providing jobs and producing goods and services. We recognize that profits are a condition of business survival and a test of efficiency. We recognize that management has the job of managing the enterprise; that it must arrange the component parts—men, machines, materials, and money—so that the enterprise's economic objectives can be achieved and it can survive in a competitive market.

—Labor Members of the National Planning Association (including, for the railway unions, H. W. Fraser, Julius Luhrsen and A. E. Lyon).

sideration of equipment conditions by types of cars, the C. S. D. chairman reported that "all indications" point to increased requirements for box cars, and thus he saw "little likelihood of any substantial relief from the present extremely tight situation for some time to come." As to stock cars, there have recently been increased seasonal demands, but there have been "no actual shortages and all requirements are being satisfactorily filled." Surplus single-deck stock cars are being used for other commodities and are thereby contributing to the alleviation of the box-car shortage.

"With the threat of a coal strike apparently averted for the present, all types of open top equipment are now in urgent demand, with indications and reliable forecasts that there will be little, if any, relaxation in the requirements the balance of the year," Mr. Kendall said in summary comment on the open-top-car situation. Previously he had predicted that this year's estimated requirements for 565 million tons of bituminous coal should be met if there is no further strike of the miners. He also noted that the Great Lakes navigation season opened early last month, the goals for the 1947 lake-cargo coal and ex-lake iron ore movements being, respectively, 52 million tons and 80 million tons. The latter would be an increase of 33½ per cent above the 1946 ore movement of approximately 60 million tons.

At the same time, other commodities requiring hopper cars "continue to move in very heavy volume," while the government export coal program had an April goal of four million tons—"far greater than anything ever before attempted." Mr. Kendall

(Continued on page 905)

## Transport Talks Heard at C. of C. Meeting

Fletcher, Land and Lawrence speak, in turn, on rail, air and highway outlook

R. V. Fletcher, former president of the Association of American Railroads and chairman of its Committee for the Study of Transportation, declared this week that the outlook of the railroads could not be said to be "desperate" if the Interstate Commerce Commission could find a way to adjust rates to meet increased costs without the long delay that has proven "so disastrous in the past," and if the railroads could be sure that they will be permitted to propose rates on the theory that they are dealing with a national system of transportation, administered by the I. C. C., rather than a system controlled by the Anti-Trust Division of the Department of Justice.

Judge Fletcher's remarks were embodied in an address, "The Railroad Outlook," delivered April 30 at Washington, D. C., at a luncheon session held in connection with the 35th annual meeting of the Chamber of Commerce of the United States. The session was devoted to "coming developments" in transportation, and other speakers included J. V. Lawrence, managing director, American Trucking Associations, and Emory S. Land, president, Air Transport Association of America. P. C. Groner, chairman of the C. of C.'s transportation-communication committee, presided.

**Prospect Not Promising**—Asserting that the railroads' outlook is not "glowing with promise," Judge Fletcher said that a rate-making system controlled by the Department of Justice would require each carrier to make its rates in a "vacuum." Such a system, he added, would be in line with the "whims and fancies of the lawyers of the division, following the leadership of Mr. Henry Wallace, whose speech on the subject sometime ago . . . conformed to the pattern now advocated by the division." "Such a policy, if it finally prevails," he continued, "will reduce the country not merely to a colonial status, but to a condition comparable only to that which prevails in the most primitive society."

Noting that the Shippers Advisory Boards have estimated that carloadings for the second quarter of 1947 will exceed actual loadings for the same 1946 period, Judge Fletcher said that "there would seem to be no reason for surmising that traffic will diminish in volume within the immediate foreseeable future." He went on to report that the cost of new equip-

ment which the railroads have on order or plan to buy will total \$900,000,000, of which sum, he said, approximately \$600,000,000 will be expended in 1947. "It may be interesting to note," he added, "that of the 634 locomotives now on order, 582 are Diesels, indicating a trend in the direction of increased efficiency and economy."

**Hysteria No Help**—The speaker said that the railroads are meeting "at least 90 per cent" of the demands for freight cars, despite car shortages and alleged maladjustments in the distribution of available cars. "We do need, in this connection . . . a bit more of cooperation and understanding of conditions, and a bit less of hysterical lamentation about discriminations that, in fact, are non-existent," he said. "You may rest assured that the cars available at the present time have been, are being and will be distributed fairly, with as much regard to ownership as conditions permit, and with as much regard as is humanly possible to the needs of commerce and the public interest." According to Judge Fletcher, the railroads, in the first 13 weeks of 1947, handled 10,518,015 loaded cars, a greater number than were handled in any similar period in the past four years.

With respect to 1947 financial prospects, Judge Fletcher stated that it has been estimated that the railroads may lose approximately \$315,000,000 in diminished passenger earnings in 1947. "It is true," he added, "that there are pending applications for a further increase in express rates, increases in mail pay and increases in passenger rates in Eastern territory, which, if granted, should add something like \$155,000,000 to the potential earnings. In other words, if we are disposed to take an optimistic view of the prospect, even with no increase in freight traffic, we might increase our total gross revenues by some \$700,000,000."

Judge Fletcher said that the railroads' estimated net income of \$500,000,000 for 1947—or about 2¼ per cent upon property investment less depreciation—is "grossly inadequate." "No one who is at all informed doubts that the railroads, in order to make needed improvements and maintain their credit, should have an income of not less than 6 per cent upon the value of their property, or in other words, the net income should be at least \$1,250,000,000," he said. "Such a return has been found to be reasonable by the highest courts in the land and is certainly in line with earnings secured by business enterprises other than public utilities."

**What the Unions Ask**—Judge Fletcher said that the "most significant feature" of the railroads' financial picture pertains to the proposed demands of the brotherhoods for wage increases. "At this moment," he continued, "the non-operating brotherhoods are asking for an increase of 20 cents per hour. If the operating unions ask for similar increases, the cost in actual wages and increased payroll taxes attributable thereto would reach the staggering total of \$810,000,000. No one can say what will be the outcome of these demands. But it is safe to say that if substantial increases are the result, if the railroads are to re-

main solvent, with credit reasonably maintained, there must be an increase in freight rates of a very substantial amount."

Mr. Lawrence, discussing "Freight Movement in Urban Areas," declared that "trucks were the whip that drove the railroads to . . . improve their [freight] service." In this respect, he referred to so-called "flagship" trains that give overnight service on trips ranging from 350 to 550 miles.

Among other things, he urged passage of S.110, the bill introduced by Senator Reed, Republican of Kansas, to stay the operation of anti-trust laws with respect to carrier rate-making procedures and other joint actions approved by the Interstate Commerce Commission, and a major overhauling of the rate structures "if our transportation in this country is to thrive and prosper."

Mr. Land, who discussed "Air Transport Prospects and Needs," asserted that the establishment and maintenance of a comprehensive air navigation and traffic control system of the federal airways is an immediate need.

According to Mr. Land, the domestic scheduled airlines carried 12 million passengers in 1946, an increase of 80 per cent over 1945, and have reasonable expectations of carrying 20 million persons in 1947. Predicting that it is possible that the volume of air passenger travel may reach 50 million persons annually within a few years, he said that such a traffic flow could

be handled only by a comprehensive traffic control system such as is now being developed by the air lines and the federal regulatory agencies for aviation.

Mr. Land stated that his association favors reasonable competition between all forms of transportation, but is opposed to integration of scheduled air transport with other forms of transportation.

The air lines' program, according to the speaker, calls for (1) a simplification and quantitative reduction in civil air regulations; (2) some redrawing of the route map for the scheduled air lines; (3) larger appropriations for air navigation and traffic control, particularly at airports; (4) better airports, with a concerted objective to make them community centers; (5) better and faster transportation facilities to and from airports; (6) devotion of more time to administrative problems and less time to personal rivalries; (7) more courtesy from employees to the traveling public; and (8) more information available to passengers, especially with regard to delays.

### New Film Designed to Aid Freight Car Movement

A new sound slide film called "Highballing" recently was made available to industrial shippers by the Carnegie-Illinois Steel Corporation. The film, produced by Carnegie-Illinois's training division in collaboration with the traffic department,

### Robert R. Young Again Discusses Monopoly

Addressing the bureau of advertising of the American Newspaper Publishers Association at New York on April 24, Robert R. Young, chairman of the Federation for Railway Progress, the Chesapeake & Ohio and the Alleghany Corporation, declared that there is "something profoundly shocking" about the situation of the American railroad industry, which, he said, "monopolists" have brought "to a point where a dollar invested in the most essential industry in the richest nation in the world is not as good as an idle dollar in the bank."

"The wealth and variety of this land have stemmed from its ten thousand nooks and crannies each in free trade with the other, each free to develop with its own wage and price level in its own way. Out of them a million small businesses, specifically acclimated, have sprung.

"It is this decentralization which has made for our prosperity, individuality and happiness," Mr. Young observed, but, "here in the last citadel of incentive enterprise, nationwide monopolists in labor, agriculture and industry, imposed or encouraged by a coalition in government, foul these fertile soils. They threaten every insurance policy, every pension and savings fund."

Referring to labor difficulties that have resulted from the exercise of monopoly powers by union bosses, the speaker said,

"I would be thrown into jail in 24 hours under the Interstate Commerce Act if I stopped the operation of a single railroad to force the vote-conscious Interstate Commerce Commission into a sorely needed rate increase," yet "no real progress has been made in legislation to deprive the labor monopolist of his power to shut down every railroad, indeed every industry. . . .

"We are simply being treated to a three-ring circus of political maneuvering and counter maneuvering with no real thought on the part of most of these politicians of really breaking the labor monopoly. Those who accept public pay in return for their oath to uphold the Constitution must be made to deliver."

Mr. Young went on to say: "You may be skeptical when I say that the seat of all monopoly in America is in the railroads, and that if our newly-formed Federation for Railway Progress can crack it there, we are in a fair way of preserving the republic. That is a strong statement, but I make it seriously. Unfortunately for the security holders, these railroad monopolists do not aim to increase the profits of the railroads. Their design is economic and political power through strange bedfellows—in labor, in agriculture, under the dome of the Capitol, in the Department of State, the Cabinet, and in the White House."



dramatizes various methods of keeping freight cars on the move, especially in respect to speedy loading and unloading, improved methods of loading and blocking and planned schedules. A limited number of prints is available from the firm's industrial relations department at Pittsburgh, Pa. With each print a discussion guide is furnished to be used by group leaders as an aid to the presentation.

### Benefit Payments Continue to Rise; Up \$869,000

Railroad retirement operations during February were marked by an increase in benefit payments of \$869,000 over the January figure, according to the "Monthly Review" of the Railroad Retirement Board. Approximately 7,100 new monthly death benefits were certified for payment under the retirement amendments, which accounted for \$416,000 in the increased payments. Also contributing to the hike were rises of \$189,000 in employee-annuity payments and \$278,000 in 4 per cent lump sum payments.

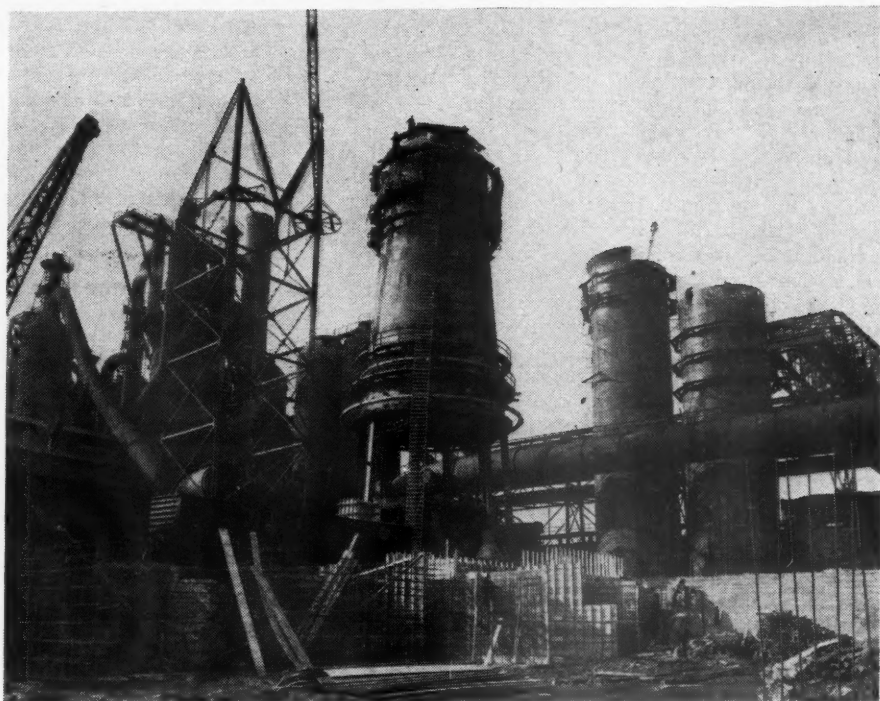
New applications for employee annuities totaled 5,125, compared with 5,500 in January. The death of 228 pensioners was reported during the month, reducing the number in current payment status to 14,327. A total of 178,632 unemployment insurance claims were filed during the month—16 per cent fewer than in January. Payments amounting to \$4,849,000 were made for unemployment in 166,150 14-day registration periods, a decline of 15 per cent from the January figure.

Applications for certificate of benefit rights declined from 28,774 in January to 17,326 in February. Decreases occurred in all regions except Denver, Colo. According to the review, lack of job opportunities continued to hamper the re-employment of unemployed railroad workers, which declined 9.4 per cent, as compared with the preceding month. Job placements numbered 2,330, of which 657 were claimants.

### T. & P. Begins Experiment With "Pipeline on Rails"

A one-year experiment to determine whether the Texas & Pacific can successfully compete with pipelines in the delivery of petroleum products was launched recently with the movement of a 20-car shipment of gasoline under special intrastate rates authorized by the Texas railroad commission in December, 1946. According to an article published in the April issue of the T. & P. employee magazine, "Topics," the "pipeline on rails" experiment began physically on February 8, when the road moved 160,000 gal. of gasoline from the Cosden Petroleum Corporation's refining plant at Big Spring, Tex., to the firm's new blending terminal at Sweetwater, Tex.

The special tariff provides that the shipper shall be given a multiple-car intrastate rate of 4¼ cents per 100 lb. on a minimum shipment tender of 20 cars, compared with the regular carload rate of 10 cents per 100 lb. on one car. The article stated that "considerable nationwide interest is being focused on the test by the rail and petroleum industries. As news of the initial ship-



Three of the largest blast furnaces in the world are under construction in the Chicago area as part of a post-war improvement and modernization program being carried out by the United States Steel Corp. Two of these are being constructed at the South Chicago works of the Carnegie-Illinois Steel Corp. to replace smaller equipment. Shown under construction here (center) is blast furnace No. 11 at the South Works, which, when completed next fall, will have a rated annual capacity of more than 500,000 tons of iron. The two tank-like structures (right) are stoves in which air is heated for the blast furnace. A second blast furnace, No. 12, is under construction at South Works. The third blast furnace in the program is No. 6 at Carnegie's Gary (Ind.) Works, which is being rebuilt and enlarged

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ment was made public, letters, telegrams and telephone calls began pouring in from refiners, carriers and other interested persons all over the Midwest and East requesting information and details about the revolutionary rate experiment."

The Cosden Petroleum Corporation had planned to construct a four-inch pipeline to serve its Sweetwater plant, but has held off construction to participate in the experiment, according to the article. It was also stated that the oil company will spend \$275,000 for facilities at the four destinations set up under the rate experiment.

### "Silver Comet" to Start May 18

The inaugural trip of the "Silver Comet," new Seaboard Air Line streamliner, operating on that road, the Richmond, Fredericksburg & Potomac, and the Pennsylvania, between New York and Birmingham, Ala., via Atlanta, Ga., will be made May 18, according to C. E. Bell, passenger traffic manager. Leaving New York at 12:45 p.m., the new train will arrive in Atlanta at 7:40 a.m. the following morning and Birmingham at 10:45 a.m. Northbound it will leave Birmingham at 2:45 p.m. reaching Washington, D. C., at 10:20 a. m. and New York at 2:50 p.m. the following day. The new train will be christened at appropriate ceremonies to be held at the Pennsylvania Station, New York, on May 18, just prior to departure on its inaugural trip.

The "Silver Comet," comparable in appointments and service to the Seaboard's "Silver Meteor," will carry both sleeping cars and streamlined coaches between Birmingham and New York. For the present, the sleeping cars offering drawing rooms, compartments, bedrooms and sections will be of the conventional heavy type, but these are to be replaced later by stainless steel sleeping cars of the double bedroom-roomette type. Diesel-electric locomotives will be used on the Seaboard. The coaches will be of all-stainless steel construction and will be equipped with reclining seats with adjustable rubber foot rests. Other refinements include fluorescent lighting, running ice water in each car, commodious lounge rooms for men and women, public address system, wide vision windows and individual radios.

The train will carry new stainless steel dining cars which will be equipped with mechanical refrigeration throughout. Ice for every purpose will be produced by the mechanical systems. These cars will carry freezing cabinets for the storing of frozen foods.

### Speed Railroads' "Atomic Bomb" Against Competition

Foreseeing railroad progress in the next decade equal to that of the past century, J. W. Barriger, president of the Chicago, Indianapolis & Louisville, told 200 members and guests of the Maintenance of Way

Club of Chicago on April 28, "We should all constitute ourselves vice-presidents of what-we-should-do-tomorrow." Stressing the importance of grade and curvature reduction, Mr. Barriger emphasized the need for sustained high speeds of both freight and passenger trains, citing disparity of time in transit, rather than difference in rates, as the chief cause of loss of traffic to highway competition. "Speed," the Monon president said, "is the real atomic bomb in the competitive arsenal of railroad transportation. Use of this weapon is just beginning."

Mr. Barriger believes that modern railroad locomotives must be electrically powered, and that the basic source of power ultimately should be coal, whether it be used to generate electricity for electrified roads or in self-contained electric traction locomotives, and whether the prime mover for the latter be steam turbine or Diesel engines using powdered coal or coal distillate fuels. Citing the Monon as a "guinea pig railroad," Mr. Barriger said he hopes to prove that the "super railroad" with maximum grades of 0.5 per cent and maximum curvature of 1 deg. is economically justified.

### A. A. R. Directors Discuss Car Supply; Hear Johnson

Discussions of the car supply and car handling comprised the principal business of the April 25 meeting of the board of directors of the Association of American Railroads, which was held in Washington, D. C. It was the first meeting since the election of William T. Faricy to the A. A. R. presidency.

For part of the meeting Colonel J. Monroe Johnson, director of the Office of Defense Transportation, was on hand with members of his staff—Deputy Director H. C. King and Director A. H. Gass of the Railway Transport Department. The O. D. T. director stated that he had talked about the freight-car situation, urging the railroad executives to keep continuously on order 12 times the number of freight cars that they hoped to have delivered each month.

Colonel Johnson's advice in that connection was based on his belief that car builders tend to build each month one-twelfth the number of cars for which they have firm orders. The colonel was not critical of this policy; he said it was natural for an industry to avoid "working itself out of a job."

Figures presented by Colonel Johnson indicated that firm orders are now outstanding for about 97,000 cars. He recognized that the railroads have agreed to bring this to a total of 130,000 cars, but said that such commitments had not been translated into firm orders. According to his view, the backlog of firm orders will have to be maintained at 120,000 cars if there is to be production of 10,000 cars a month, as contemplated by present arrangements for steel supplies. The O. D. T. director said that 1,878 freight cars had been built during the first 18 days of April.

The A. A. R. board voted at the meeting to appropriate \$25,000 for research on the

lateral forces exerted by locomotives on curved track. That amount will be spent on tests of the 4-8-4 type locomotive. The tests will be for the purpose of improving locomotive design, and they will be conducted with testing instruments on the locomotive, track and a test car, according to Robert S. Henry, assistant to president, A. A. R.

### Railroads Offer to Cooperate With Historians

More than forty Class I railroads have expressed to seven groups and associations cooperating in the study of business and railroad history their willingness to receive applications from qualified historical scholars for access to source records, according to a report presented by Professor Richard C. Overton, of Northwestern University, to the "Lexington group," interested in the study of railroad history, meeting at Columbus, Ohio, on April 24, in connection with the annual meeting of the Mississippi Valley Historical Association. Qualified assents to the inquiry of the cooperating historical associations were received from a number of other railroads, while others have not yet replied. Only one railroad has stated that its records would not be available. This result, Professor Overton commented, presented a challenge to the historian, and an opportunity to study rail history from the sources.

In addition to this report, Professors Donald McMurry of Russell Sage College, Charles W. Turner of Washington & Lee University, and Howard Bennett of Northwestern University, and F. H. Woolfall of the New York Central, discussed the technique of handling railway source archives. Professor I. L. Sharman, University of Michigan, presided over the session, attended by approximately 75 historians.

The Lexington group is an informal association of those particularly interested in railroad history, which takes its name from the fact that it was formed five years ago by a group attending the meeting of the Mississippi Valley Historical Association at Lexington, Ky. Subsequent meetings have been held in conjunction with the American Historical Association, Economic History Association, and Mississippi Valley Association meetings.

### Railroad Diesel Forum at June Meeting of A. S. M. E.

Charles E. Wilson, of Detroit, president of the General Motors Corporation, and Robert R. Wason, of New York, chairman of the board of the National Association of Manufacturers, will be among the speakers at the semi-annual meeting of the American Society of Mechanical Engineers at Chicago June 15 to 19. The Stevens Hotel will be the headquarters.

About 100 speakers and authors, including leading engineers, scientists, industrialists, and educators, will take part in the four-day technical program starting Monday morning, June 16. The program, in general, will feature the organization's 1947 theme, "The Engineer's Responsibility in Increasing National Productivity."

Among the 40 technical sessions will be a

railroad forum on Diesel locomotive design for reduced maintenance, sponsored by the Railroad Division. This will be held at 2 p. m. on June 17, and eight speakers will participate. These are A. H. Candee, Westinghouse Electric Corporation; J. W. Teker, General Electric Company; M. D. Henshaw, General Electric Company; John Seagran, American Locomotive Company; S. D. Taul, American Locomotive Company; D. R. Staples, Baldwin Locomotive Works; W. W. Schettler, Fairbanks, Morse & Co.; L. E. Endsley, consulting engineer. The Railroad Division executive committee meeting will be held in the morning preceding the forum.

Eugene W. O'Brien, president of the society, will speak at the president's luncheon Monday noon on Broader Vistas. On Tuesday noon L. J. Fletcher, director of training and community relations for the Caterpillar Tractor Company, Peoria, Ill., will speak on Citizenship. On Wednesday noon H. J. Rose, vice-president and director of research for Bituminous Coal Research, Inc., Pittsburgh, Pa., will speak on Trends in Solid Fuels Research. Mr. Wilson and Mr. Wason, who is president of Manning, Maxwell & Moore, New York, will speak at dinners on Monday and Wednesday evenings, respectively.

Technical sessions will include a meeting Tuesday evening sponsored by the Power Division jointly with the nuclear energy application committee. The American Rocket Society, an affiliate of the A. S. M. E., will co-sponsor a session Wednesday afternoon. Important group meetings will be held by the gas turbine coordinating committee, the research committees on fluid meters, on metal cutting data, and the safety code committee on elevators. Additional subjects to be considered in technical sessions are machine design, fuels, materials handling, metals engineering, process industries, rubber and plastics, aviation, power, production engineering, heat transfer, oil and gas power, management, citizenship, and education.

### C. & O. "Ferries" Automobiles

Passenger train "auto ferry service" for automobiles and their operators has been inaugurated by the Chesapeake & Ohio between Washington, D. C., and Cincinnati, Ohio, President Robert J. Bowman has announced. This service, he said, for the first time in American railroad history will enable motorists to avoid tiring and hazardous driving over the mountainous country between these points and still have their automobiles available for use when they reach their destination.

Automobiles will be placed aboard specially equipped express cars on the same trains the owners will travel, and the vehicles will be available within two hours after reaching the destination. Ferrying service will be provided daily by the westbound "Sportsman," leaving Washington at 11:45 a. m., and the eastbound "Fast Flying Virginian," leaving Cincinnati at 11:55 a. m. An extra car of four-automobile capacity will be attached to each train. If the demand for this service increases, other cars will be added, Mr. Bowman said. To place the plan in operation, the



C. & O. is equipping three express cars<sup>®</sup> having end doors with ramps to load and unload the automobiles and blocks to hold them in place while in transit.

The road has filed with the Interstate Commerce Commission a tariff for handling touring automobiles between the two cities upon purchase of two passenger tickets for the full trip and payment of a charge of \$2.50 per 100 lb. for the automobile, i.e., the cost for transporting an automobile weighing 2,600 lb. would be \$65, exclusive of passenger tickets.

### Kendall Calls for Closer Teamwork

(Continued from page 901)

estimated that not more than 70 per cent of that tonnage would actually be exported in April.

With respect to flat cars, the C. S. D. chairman reported that there has been "little relaxation" in demands, and he went on to say that all covered hoppers "continue in active demand." Refrigerator car loadings "continue heavy," but the more favorable weather has permitted more expedited movement of empties, so "all shortages have been overcome and all orders are now being filled on a current basis." The I.C.I. situation has also benefited from the more favorable weather, the number of embargoed freight houses having been "reduced materially."

**Using Government Cars**—In his discussion of military transportation, Mr. Kendall revealed that an arrangement has been worked out with the Army and Navy whereby railroads serving northwest ports have been relieved of furnishing any railroad-owned box cars for the movement of ammunition now being returned from the Pacific areas. Steel box cars owned by the Navy have been assigned to handle such traffic and outgoing ammunition in shuttle service between the ports and ordnance depots in Oregon and California. Also, the chief of transportation of the Army is continuing his search for Army freight equipment which might be leased to the railroads. So far, a total of 738 Army box cars have been inspected, of which 190 have been found suitable and leased to the carriers, Mr. Kendall said.

The usual figures on the turn-around time of freight cars show that the general average for all types of cars in March was 14.16 days, compared with 14.68 days in February and 14.95 days in January. Detention reports indicated that in March the average detention of cars by receivers over the free time was 16.77 per cent as compared with 16.42 per cent in February and 18.18 per cent in March, 1946.

### See Car Supply Outlook Encouraging in Midwest

An optimistic air prevailed throughout the 78th meeting of the Midwest Shippers Advisory Board held in Chicago on April 25. It was the general consensus that the car shortage in the territory covered by the board is greatly alleviated, and no serious difficulties are expected in moving the grain crops in this area.

In a brief talk at a joint luncheon with the Traffic Club of Chicago, Irving M. Peters, traffic manager of the Corn Products Refining Company, Chicago, who is also national general chairman of the 1947 "Perfect Shipping Campaign," stated that the economic situation of this country demands that a reduction be made in the extraordinary claim bill of the railroads, motor lines and express agency, and, in connection with "Perfect Shipping Month," reminded his listeners that shipping containers must be considered as an integral part of the product being shipped.

"Through 'scientific product protection' you can make your shipping problems become shipping profits," C. J. Carney, Jr., managing director of the Industrial Packaging Engineers Association, told the board. Mr. Carney pointed out that many firms prominent in industry had employed packaging engineers, and cited evidence of increased carrier action along these lines through their recent efforts to find suitable packaging personnel through his association.

The "real key to perfect shipping," Kinsey N. Merritt, vice-president—traffic of the Railway Express Agency, told the board, lies in full attention to the problem by those concerned. Not merely the initiation of action, but following action through to accomplishment is essential. In continued action on loss and damage problems—not just through one "Perfect Shipping Month" but throughout the year—he saw hope that "when we gather in April, 1948, the problem will be giving way before us and we will have made real progress, to a point where our shipping and our handling—shippers and carriers alike—will have reached a high degree of perfection."

### Passenger Service Improvements Effected April 27

With a change to Daylight Saving Time effective April 27, a number of important passenger service improvements were made in the West and Midwest. The Chicago & Northwestern and Union Pacific announced daily departure, instead of tri-weekly "sailings," of the "City of Los Angeles," 39 hr.-45 min. Chicago-Los Angeles streamliner. A stop at the Lund (Utah) gateway for Zion and Bryce Canyon National Parks has been added in both directions.

The "Chief" of the Atchison, Topeka & Santa Fe now runs from Chicago to Los Angeles, Cal., in 46 hr. 30 min., 1½ hr. faster than previously, and makes the return journey in 46 hr., approximately 1 hr. faster than heretofore. The "Grand Canyon," a new daily regular-fare train, carrying through equipment to San Francisco, Cal., operates between Chicago and Los Angeles on a 48 hr. 45 min. schedule. Eastbound the "Grand Canyon" provides a one-night service from Kansas City, Mo., to New York, leaving Kansas City at 7:30 a.m. and arriving at Chicago at 3:30 p.m., in time for eastern connections. Other planned Santa Fe improvements, including inauguration of the "Texas Chief," and daily operation of the "Super Chief" and "El Capitan," have been withheld on account of production delays on the new equipment, but are expected in the near future.

With the change of time, the Illinois Central inaugurated its new "dayliner," the "City of New Orleans," operating between Chicago and New Orleans, La., on a 15-hr. 55-min. schedule, replacing the conventionally-equipped "Creole." The new trains

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New dining cars, built by the Budd Company for the Florida East Coast and the Atlantic Coast Line, are now in service. Seating 48 passengers each, they are equipped with large vibration-resistant tables, and aluminum chairs with foam rubber seats and backs, upholstered with soft fabrics. Decorative touches include colorful drapes and venetian blinds at the large panorama type windows, photo murals of scenes of historical interest, and servers surmounted by large mirrors at the ends of the dining sections. The kitchens are equipped with stainless steel sinks, lockers, refrigerators and ranges

depart from both Chicago and New Orleans at 8:00 a.m., arriving at their respective terminals at 11:55 p.m., making it possible for the first time for railroad passengers to make this journey in a single day. The "City of New Orleans," powered by a 6,000-hp. Diesel locomotive, will average 58 m.p.h. on its 921-mi. run.

The Canadian Pacific has cut 1 hr. 40 min. from the eastbound running time of its transcontinental "Dominion" from Vancouver, B. C., to Montreal, and announces restoration this summer of the "Mountaineer" between Chicago and Vancouver in connection with the Chicago & Northwestern and Soo Line.

The "City of Memphis" has gone into service on the Nashville, Chattanooga & St. Louis, cutting approximately 2 hr. from the previous running time between Nashville, Tenn., and Memphis.

### Lackawanna Sells Commutation Tickets by Mail

Commuters and other purchasers of multiple-ride tickets on the Delaware, Lackawanna & Western no longer will be required to "form a line" at ticket windows in stations in New Jersey, if they elect to avail themselves of the "pay-by-check," or mail order plan recently instituted by that road.

Customers preferring to buy tickets at stations will be permitted, under the new plan, to tender their checks and pick up their tickets. Those preferring to order weekly, monthly, or other multiple-ride tickets by mail may fill out order blanks and mail them, accompanied by checks in the exact amount of the price of tickets, which will be delivered by mail by the railroad.

The new plan is not associated with the recently-adopted credit-card plan of many railroads. Patrons dealing with ticket agents may establish their identity by presenting a driver's license, club membership card or other suitable credentials. Those electing to order tickets by mail are asked to include checks in the exact amount of the price of tickets. The order blanks, which accompany checks, are available in all suburban ticket offices. The orders are in no sense applications for credit ratings. Credit records and bookkeeping transactions are not involved in the plan.

### High Steam Locomotive Utilization Reported to B. C. R.

High utilization records for coal-fired steam locomotives were reported to operating and mechanical officers of many railroads of the United States and Canada who met as guests of the motive-power committee of Bituminous Coal Research, Inc., at Battelle Memorial Institute, Columbus, Ohio, on April 29.

The report referred to six coal-fired Class S 4-8-4 type locomotives of the New York Central, of which individual engines exceeded 28,000 miles per month during the six-months' period October 1, 1946, through March 31, 1947, and in which all six operated 786,818 miles for an average of almost 22,000 miles per month. The locomotives were assigned to passenger trains running between Harmon,

N. Y., and Chicago, a distance of 926 miles, and, according to E. C. Payne, chairman of B. C. R.'s steam-locomotive performance subcommittee, burned mechanically cleaned egg-size coals from western Pennsylvania, Ohio, and southern Illinois. They were refueled twice en route between the Harmon and Chicago terminals.

Announcement of the development of a device known as an "undergrate air distributor" for railroad steam locomotives was also made at this meeting. The device is reported to increase the efficiency of burning coal in the steam locomotive by improving the distribution of undergrate air for combustion. With uniform air flow to the fuel bed, excessive losses of unburned coal out of the stack are avoided and the value of bituminous coal as a locomotive fuel is increased. Road tests, it was reported, indicate fuel savings of 7 to 15 per cent, depending on the speed of the locomotive. Another important advantage claimed is a reduction in clinking, which lowers maintenance cost and increases the availability of the locomotive.

Perfecting the device in cooperation with the inventor — Vaughn Mansfield, chief engineer of the Southern Coal Company, Memphis, Tenn.—was a major engineering project of Bituminous Coal Research.

The meeting was held to analyze current progress of the locomotive research projects being directed by B. C. R. and to determine the scope of future activity.

### Los Angeles Paper's Article on Car Shortage—Correction

The news item in the *Railway Age* of April 19, page 803, reporting the reply of William T. Faricy, president of the Association of American Railroads, to a Los Angeles, Calif., newspaper article's attack on A. A. R. practices with respect to the distribution of freight cars was in error in stating that the article appeared in the Los Angeles Times. The article was published in the Los Angeles Daily News.

### Budd Company Seeks to Interest Women in Railroads

The Budd Company of Philadelphia, Pa., manufacturers of passenger cars, has worked up a program on railroading for the use of women's clubs and is presenting a synopsis of it in an 8-page article in the current issue of "Agenda," a clubwomen's magazine. Sufficient direction for a session on railroading is provided in the article, but for those who want more detailed assistance, the Budd Company offers a "program package," which includes full information right down to a model "press release" to enable the women to get publicity in their local newspapers for their intellectual excursion into the transportation industry.

One of the articles in the "program package" deals with the heavy taxes assessed against the railroads and emphasizes the industry's need for a wider profit margin. It also draws attention to the industry's great war and peacetime service to the nation, and the importance of continuing transportation under the aegis of free enterprise. Women are reminded that they have a stake in the railroads; whether they

travel or not, they need to keep informed about the nation's transportation problems, because this is "part of the vigilance with which as mothers and voters, they need to guard our democracy and national security today for our children tomorrow."

The program was arranged by the Budd Company's public relations consultant, Mrs. Wilma Soss, who points out that, aside from their interest in civic affairs, women as investors have a large stake at issue in the economic success of the railroad industry. Mrs. Soss points out that this effort by the Budd Company conforms to the suggestion made by two railway executives, reported editorially in the April 12 *Railway Age*, that equipment manufacturers would do well in their own interest to promote greater public understanding of railroad problems—in particular, the carriers' needs for larger net earnings.

An additional thought behind this appeal to civic-minded women is recognition of the fact that purveyors of ideologies of questionable loyalty to American traditions of liberty are active in promoting their programs among women's organizations—not without some evidence that they are making headway.

### Freight Car Loadings

Freight car loadings for the week ended April 26 were not available when this issue went to press.

Loading of revenue freight for the week ended April 19 totaled 865,846 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

#### Revenue Freight Car Loading

For the Week Ended Saturday, April 19

| District                                | 1947              | 1946              | 1945              |
|---|-------------------|-------------------|-------------------|
| Eastern .....                           | 172,147           | 143,019           | 167,226           |
| Allegheny .....                         | 189,691           | 124,365           | 193,039           |
| Pocahontas .....                        | 60,831            | 15,777            | 54,239            |
| Southern .....                          | 130,259           | 114,719           | 132,129           |
| Northwestern .....                      | 120,870           | 79,417            | 117,845           |
| Central Western .....                   | 128,102           | 110,644           | 127,471           |
| Southwestern .....                      | 63,946            | 62,902            | 72,751            |
| <b>Total Western Districts .....</b>    | <b>312,918</b>    | <b>252,963</b>    | <b>318,067</b>    |
| <b>Total All Roads .....</b>            | <b>865,846</b>    | <b>650,843</b>    | <b>864,700</b>    |
| <b>Commodities:</b>                     |                   |                   |                   |
| Grain and grain products .....          | 48,436            | 34,396            | 51,299            |
| Livestock .....                         | 14,039            | 18,618            | 15,401            |
| Coal .....                              | 185,733           | 29,709            | 165,196           |
| Coke .....                              | 14,137            | 7,083             | 14,488            |
| Forest products .....                   | 43,100            | 45,086            | 42,542            |
| Ore .....                               | 50,503            | 12,269            | 61,147            |
| Merchandise i.e.l. .....                | 126,456           | 127,967           | 113,820           |
| Miscellaneous .....                     | 383,442           | 375,715           | 400,807           |
| April 19 .....                          | 865,846           | 650,843           | 864,700           |
| April 12 .....                          | 758,166           | 649,298           | 847,013           |
| April 5 .....                           | 715,159           | 643,644           | 765,672           |
| March 29 .....                          | 829,412           | 809,142           | 836,000           |
| March 22 .....                          | 844,041           | 804,606           | 816,741           |
| <b>Cumulative total, 16 weeks .....</b> | <b>12,857,186</b> | <b>11,676,764</b> | <b>12,555,615</b> |

**In Canada.**—Car loadings for the week ended April 19 totaled 72,813 cars, as compared to 71,312 cars for the previous week and 60,536 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

|                                      | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|--------------------------------------|---------------------|-----------------------------------|
| <b>Totals for Canada:</b>            |                     |                                   |
| April 19, 1947 .....                 | 72,813              | 37,959                            |
| April 20, 1947 .....                 | 60,536              | 32,427                            |
| <b>Cumulative totals for Canada:</b> |                     |                                   |
| April 19, 1947 .....                 | 1,095,746           | 598,070                           |
| April 20, 1947 .....                 | 1,058,137           | 561,660                           |



# With the Government Agencies

## Berge Gives Court "Conspiracy" Data

Justice Department offers 809  
exhibits at resumption  
of Lincoln suit

The federal government's anti-trust suit against 47 western railroads, two railroad associations and approximately 90 railroad and banking officers, has placed before the court "great and momentous questions of law and public policy which involve conflict between the Sherman anti-trust act and the Interstate Commerce Act," Elmer A. Smith, chief of counsel for the defendant railroads and senior general attorney of the Illinois Central, declared on April 23, as trial of the suit was resumed in a one-day hearing in the district court at Lincoln, Neb.

As was reported in last week's *Railway Age*, the defendant railroads were granted until October 1 to file objections to some 809 voluminous exhibits submitted as evidence by the Anti-trust Division of the Department of Justice, and to make motions as they see fit. The associations named in the suit are the Association of American Railroads and the Western Association of Railway Executives.

The government will be allowed 45 days within which to file a reply brief, subsequent to October 1, after which the case will be set for oral argument. This schedule as set by Judge John M. Delehant is expected to place resumption of the trial sometime after the first of the year. The suit was originally filed on August 23, 1944.

The session opened with an outline of the government's case by Wendell Berge, assistant attorney general, who reiterated the charge that the defendants are guilty of restraining trade and commerce in transportation and of monopolizing railroad transportation. Following the tabling of the plaintiff's exhibits, Mr. Smith told the court that application of the Sherman Anti-trust act to a regulated industry, such as the railroads, presents "wholly different problems than application of the Anti-trust act to an unregulated industry." He said that in the case of the railroads "there has been a substitution of government regulation for competition as a means of protecting the public interest."

"The Department of Justice seeks to superimpose upon the regulation of the railroads provided by the Interstate Commerce Act, a theory of enforced competition which the department has evolved in the last four or five years," he declared. "Under the new theory, rates must be competitive although this standard is nowhere to be found in the Interstate Commerce Act."

## Rehearing on Pullman Sale Denied by Supreme Court

The Supreme Court this week denied petitions for rehearing of the case wherein its March 31 ruling had upheld the January, 1946, decision of a special three-judge federal court, sitting at Philadelphia, Pa., which approved sale of the Pullman Company's sleeping-car business to the so-called "buying group" of railroads. As noted in the *Railway Age* of April 5, page 714, the Supreme Court's ruling was a 4-to-4 decision with no written opinion, the precedent being that in cases of tie votes the ruling of the lower court stands.

He pointed to increases in prices controlled by competition—67 per cent in the case of wholesale prices of manufactured goods, 137 per cent on farm products and 116 per cent on foodstuffs—as compared to freight rate increases which have amounted to only 17.6 per cent since 1939. Emphasizing the duty of the individual carrier in proposing rate changes, Mr. Smith declared that "these matters cannot be intelligently or fairly determined by one carrier acting in a vacuum, but can be determined only through conference, consultation and collaborations." (Mr. Smith's views in the case were covered in *extenso* in an article in the *Railway Age* of August 4, 1945, page 208).

In connection with the presentation of the government's mountain of evidence, Mr. Berge charged the defendants with "conspiracy" to attain "monopoly power." More specifically, he asserted that, "through agreements and understandings, the defendants have eliminated competition between railroads by concertedly fixing non-competitive freight rates and passenger fares and by agreeing upon uniform and non-competitive train schedules, services and facilities." Continuing this line of reasoning, he declared that the defendants "merged the pre-existing national and regional railroad rate bureaus and trade associations into an integrated hierarchy of bureaus and associations . . . a cartelized private government of the railroad industry which has continued to this day."

## Railroad for Sale

A 50-mile railroad, from Carrabelle, Fla., to Tallahassee, is included in property comprising the Camp Gordon Johnston development which is being offered for sale by the War Assets Administration. The W. A. A. announcement said that the railroad property includes port facilities, and that the line, which connects with the Seaboard Air Line, has side-track facilities at four stations in addition to Carrabelle.

## I. C. C. Hears More on Ship Rate Problem

Railroads insist on freedom  
to adjust charges to meet  
any situation

Following the conclusion on April 26 of hearings at Washington, D. C., on those phases of its Ex Parte No. 164 investigation of water-competitive railroad rates pertaining to transcontinental railroad rates, intercoastal water rates and all-water, water-rail and rail-water rates between Pacific coast ports and interior points, the Interstate Commerce Commission this week held hearings on those phases of the same overall probe relating to all-rail commodity rates between California, Oregon and Washington and Pacific coastwise water rates. Chairman Aitchison presided over hearings in the latter proceedings, docketed as Nos. 29721 and 29722, respectively.

The railroads' position was summarized by M. E. Boyd, assistant freight traffic manager of the Western Pacific, who also appeared in behalf of the Atchison, Topeka & Santa Fe, the Southern Pacific, the Great Northern, the Northern Pacific, the Union Pacific, the Chicago, Milwaukee, St. Paul & Pacific and the Spokane, Portland & Seattle. As noted in *Railway Age*, April 26, page 868, the railroads have proposed to increase, with certain exceptions, the maximum railroad rates between California, Oregon and Washington by the full 25 per cent sought in the Ex Parte No. 162 case, while the water carriers want the rail charge raised 50 per cent above the pre-162 basis.

**A Revenue Question**—Mr. Boyd testified that his statement was not to be construed as an indication that "the rail carriers are averse to increased revenues nor that they are satisfied with their existing revenue situation." "However," he said, "it is the position of the rail carriers that substantially increased rates do not always produce additional revenue. Whether a drastic increase in the rate structure would produce additional revenue is questionable. It is the view of the rail carriers that the water lines' proposals do not give sufficient weight to factors such as truck competition, rates from competing territories not involved in these proceedings, dislocation of industry and the vital question as to whether a substantial increase in freight rates would tend to dry up the traffic. The truck competitive phase includes not only the common carrier truck lines but contract carriers and proprietary operators as well. On some commodities, the competition of so-called itinerant merchants is a factor."

(Continued on page 910)

## Rates on War Freight Assailed in Complaint

Department of Justice follows through from Bureau of Budget investigation

Following a Bureau of the Budget investigation of freight rates on the Army's wartime shipments, the Department of Justice this week filed with the Interstate Commerce Commission a complaint alleging that unjust and unreasonable charges resulted from the refusal of the railroads to apply their export rates to government freight destined for overseas but stopped "temporarily" at interior storage-in-transit depots, which were established "in order to avoid confusion and congestion at port areas and to insure orderly and expeditious movement of military and naval property . . . to the fighting fronts and other points overseas." The complaint reveals that the railroads were willing to apply the export rates, plus stopover and out-of-line charges, to the traffic involved, provided this were done under a section 22 agreement stipulating that land-grant deductions would not apply also.

**Faricy's Answer**—The complaint covers shipments during the period from June 3, 1941, to October 1, 1946, when the Boren act providing for complete repeal of the land-grant-rate law became effective. The commission is asked to award "whatever reparation may be authorized by law." The newspapers had the complaint before the commission, for the Department of Justice issued an April 25 press release announcing that it would be filed. This release brought a prompt reply from William T. Faricy, president of the Association of American Railroads, who noted that the railroads had not up to that time been served with the complaint.

"The fact is," Mr. Faricy continued, "that in no case did the government pay higher rates than commercial shippers and in most cases the government paid lower rates put into effect as a special concession by the railroads, as permitted by the Interstate Commerce Act. In no case did the government pay charges higher than the legal charges. The only question is one of the reasonableness of the rates, and we are glad that this question is to come before the proper tribunal for decision. It will clearly appear that the rates which were charged to the government were not only reasonable but extremely low, and in most cases were less than those charged to any other shipper for the same service."

As noted above, the complaint is an aftermath of an investigation conducted by the Bureau of the Budget, the inquiry having been made at the request of former Senator Wheeler of Montana, who was at the time chairman of the Senate committee on interstate commerce. The report on the investigation asserted that the federal government "has not only paid excessive charges in a stupendous amount before and after Pearl Harbor, but is still paying such excess charges on presently moving traffic and will continue to pay them until appro-

priate action is taken to remedy the situation" (see *Railway Age* of February 9, 1946, page 333). Late last year, Attorney General Clark announced that the Department of Justice, in response to a request from the secretary of war, would initiate proceedings to determine the reasonableness of charges on the Army's wartime shipments.

**The Allegations** — The present complaint says, among other things, that the railroads for many years have maintained export rates, lower than domestic rates, which permit both the government and private shippers to store export freights at the ports when shipping space is not available. When land-grant deductions were in effect they applied on such export rates. When the Army's interior storage-in-transit depots were established, the complaint continues, the government requested the railroads to apply the export rates to freight passing those facilities. As indicated above, the railroads refused to do so unless the government agreed to waive the land-grant deductions. The government was unwilling to enter a section 22 agreement on that basis, and thus the domestic rates applied to traffic moving through the interior storage depots.

Meanwhile, the complaint charges that railroad tariffs applicable on commercial shipments published export rates on freight stopped at interior storage points; and that such tariffs were changed on three different occasions to insure their restriction to commercial shipments.

**Sees a "Conspiracy"**—Another allegation of the complaint, which is being handled by the Department of Justice's Anti-Trust Division, is that the railroads "agreed and combined with each other to deprive, and did deprive, this complainant of storage-in-transit arrangements under their published export rates, applicable over or near storage-in transit points, with the purpose, motive, intention and result of evading their obligations under land-grant laws and depriving this complainant of land-grant deductions from their published export rates."

The April 25 press release announcing that the complaint would be filed included statements by Attorney General Clark and Assistant Attorney General Berge, who is in charge of the Anti-Trust Division. "This," said Mr. Clark, "is one of a series of cases which the Department of Justice intends to file in an effort to recover overcharges paid by the government to the railroads of the country on its wartime traffic. The Interstate Commerce Act specifically authorizes recovery in proceedings of this nature brought by any shipper who has been overcharged. We are, in effect, asking that the government be charged the same rates as the railroads were willing to make available to private shippers during the war."

Mr. Berge's comment suggested the possibility of the government recovering large amounts of money from the railroads. "It is," he said, "impossible to estimate the amount that may be recovered by the government in this proceeding, since the Interstate Commerce Commission must determine the applicable rates. The necessities of war conditions, however, made necessary that

(Continued on page 911)

## B. & O.'s White Denies Tobey Charge on Loan

Defends new revamp plan which involves extension of debt to R. F. C.

Roy B. White, president of the Baltimore & Ohio, this week denied, "without reservation," the truth "of any statement, expressed or implied," that his road "has been a party to any fraudulent or otherwise improper act incident to its dealings with the Reconstruction Finance Corporation, or anyone else." The denial was embodied in a statement Mr. White made to the Senate committee on banking and currency at the resumption on April 29 of public hearings in connection with the committee's investigation of that phase of B. & O.'s 1944 debt-adjustment plan which involved extension until 1965 of an R.F.C. loan in excess of \$80 million.

The investigation was launched recently by the committee's chairman, Senator Tobey, Republican of New Hampshire, and opening hearings were held April 10 and 11, as reported in the *Railway Age* of April 19, page 803. Senator Tobey has brought out the fact that certain former members of the R.F.C. staff have become B. & O. officers, and he has charged that there was "chicanery and collusion" in connection with the loan extension. "I still think so," he said at the April 29 hearing.

**Says Its Officers Run B. & O.**—In this connection Mr. White denied that the adjustment plan "is in any respect the result of fraud or collusion" on the part of the B. & O. "Such statements," he added, "are wholly untrue and are a gross injustice to the company." He went on to say also that, at all times during his term as president, the management and control the B. & O. "has been and is in the hands of its duly elected officers"; and that the president and directors "in all circumstances, exercised their uncontrolled judgment and discretion in discharging their responsibility of managing the company."

Witnesses at the hearing, in addition to Mr. White, included C. M. Clay, former general solicitor of the B. & O. who has been a critic of the adjustment-plan proceeding; W. W. Sullivan, chief of the R.F.C.'s Railroad Division; John D. Goodloe, chairman of R.F.C.; and R. L. Snodgrass, B. & O. vice-president and former assistant general counsel of the R. F. C.

After making the aforementioned denials, Mr. White's statement identified the charges being aired before the committee as "the same charges as made before the United States district court of three judges that approved our 1944 plan after full hearing, and the maker of the charges is the same Mr. Clay who appeared and testified before the court." The court, the B. & O. president added, dismissed the charges with a statement saying that Mr. Clay's "expressed opinion that the plan was unnecessary and therefore not in good faith, was based on his own personal view and was not supported by the evidence or exhibits in the case."



Mr. White then proceeded to outline in detail various considerations which led the B. & O. to its conclusion that the adjustment plan of 1938 would have to be supplanted by the 1944 plan if the company's solvency were to be preserved. The 1938 plan had been approved by the court and put into effect before Mr. White assumed the presidency on June 1, 1941.

**McLaughlin Act Proceeding** — Because earnings had not been sufficient to make the 1938 plan work out as well as had been anticipated, the B. & O. management became concerned about the road's 1944 note maturities totaling \$122,000,000, of which the R. F. C. held approximately \$86,000,000, Mr. White said. And while the management was considering this "problem of staggering proportions," the B. & O.'s financial vice-president, George Shriver, died. A committee of the board of directors was appointed to select a successor as promptly as possible; and that committee, after considering "several different men," selected Mr. Snodgrass as "the most desirable." Mr. White said he then persuaded Jesse H. Jones, then chairman of R. F. C., to release Mr. Snodgrass, although Mr. Jones "was reluctant to do so."

Meanwhile there was under consideration in Congress the bill which finally became the McLaughlin act. This was a reenactment of the former Chandler act, providing for the voluntary readjustment of railroad financial structures, under which the B. & O.'s 1938 adjustment plan had been worked out. Senator Tobey has indicated his suspicion that proponents of the McLaughlin act were thinking of its possible use for a new B. & O. adjustment plan; and he has charged that this was not indicated by Mr. Snodgrass when the later expressed R. F. C. views in favor of the legislation at 1942 hearings before the Senate committee on interstate commerce.

While Mr. White denied that the B. & O. was planning a second adjustment plan at that time, he pointed out that the road's position in favor of the McLaughlin act was not concealed, for its counsel, Henry W. Anderson, "attended the April, 1942, hearings before the House committee and proposed certain amendments to the bill, but urged its enactment with or without those amendments." Moreover, Mr. White wrote a letter to the general counsel of the Association of American Railroads "outlining the benefits that had come to us through the Chandler act and authorized him to read that letter into the record before the House committee."

**Debt Curtailment** — Mr. Snodgrass came to the B. & O. on September 1, 1942, and immediately went to work on the problem of the 1944 maturities, Mr. White said. In November, Mr. Snodgrass presented a proposal that the road invite holders of its bonds to tender them for sale to the company at prices to be named by the holders. The proposal was adopted and was "highly successful" in that it resulted in the acquisition of obligations in the amount of \$68,500,000 for approximately \$36,100,000.

The B. & O. then explored the possibility of marketing new securities to pay off the balance of the 1944 maturities, including the R. F. C. loan. It was told

that the market "was not yet ready to take a new B. & O. issue." It next tried to obtain bank loans, but "there again we met only with disappointment." Finally Mr. Snodgrass attempted without success to arrange a loan with "one of the large finance companies."

It was only after the "failure of these various efforts," as Mr. White put it, that the B. & O. resorted to another adjustment plan under the provisions of the McLaughlin act. Meanwhile he also defended the B. & O.'s policy of maintaining a "strong cash position," saying that it was "extremely fortunate" to have done so in view of the increased expenses which have come.

**No Apologies** — Mr. White said in closing that the B. & O. management is "no less proud" of its "accomplishment toward the financial rehabilitation of the company" than it is of the "physical rehabilitation" which he had referred to in his statement. He is "convinced" that adoption of the new adjustment plan "was wise and in the best interests of every person interested in the company either as a stockholder or creditor." If the B. & O. management were wrong, Mr. White added, "it must be wrong for a railroad company to effectuate a plan with its creditors whereby it is able to continue to function as a financially sound transportation system in the public service."

Before questioning Mr. White, Senator Tobey told of a "fine tribute" he heard paid recently to the B. & O. president by one who called him "the best operating executive on the railroads." Mr. White, who had previously identified himself as a "telegraph operator," thanked the senator. Meanwhile, Mr. Tobey had said that the testimony at the present series of hearings would not be "spectacular," but it would be designed to develop evidence tending to prove that, "as some of us believe," the loan extension was "not as it should be."

Mr. Tobey then asked why the B. & O. did not reduce its R. F. C. loan during the 1941-45 period, when it was in the "most lush quick asset position" in its history. Mr. White disputed that characterization of the B. & O. position, and Mr. Tobey promised to offer evidence justifying his description. Then followed a discussion of the B. & O.'s refusal to ask the court for permission to defer consummation of the adjustment plan pending completion of the present investigation, as Senator Tobey had suggested.

**Court Refused Delay** — E. H. Burgess, vice-president and general counsel of the B. & O., in that connection expressed his view that the court would have refused to permit the delay—"on the showing that would have been made." Meanwhile, Mr. Burgess conceded that the B. & O. did not want any delay, because, as he explained, it is undertaking to complete its compliance with a decree which has "in substantial part" been carried out. Moreover the B. & O. vice-president pointed out that the court denied a petition for delay which was filed by a group of bondholders.

Senator Tobey insisted that the Burgess statement did not change his view that the court would have met a request for delay

if it had been made jointly by the B. & O. and R. F. C. with a statement to the effect that the parties desired to await the outcome of the committee's investigation. Mr. Burgess replied that the B. & O. and R. F. C. were only two of many parties to the plan, and that it would have been "bad faith" on their part to have sought a delay. He added that, with the B. & O. "stoutly denying," as it does, that there was any "bad faith, mishandling or fraud," it could not go into court and ask for a delay on any such basis.

Senator Robertson, Democrat of Virginia, brought out through his questioning of Mr. White that the B. & O.'s purchases of its obligations at a discount and the adjustment plan were carried out in accordance with legislation enacted by Congress. But Senator Tobey broke in to observe that that didn't justify the purchase of the obligations at a discount with funds that might have been applied to meeting the impending maturities. Senator Sparkman, Democrat of Alabama, brought out the fact that the R. F. C. had lost no money in transactions with the B. & O., while Mr. White replied in the affirmative when Senator Fulbright, Democrat of Arkansas, asked if the road would have been forced into trusteeship of the \$36,000,000 used to purchase obligations at a discount had been applied instead to a reduction of the R. F. C. loan.

**Clay's Comments** — Mr. Clay, who had testified at the previous hearings, was recalled by Senator Tobey to give his "reaction" to Mr. White's testimony. The former B. & O. general solicitor said first that he didn't think Mr. White had been "unfair" to him. He went on to state again his objections to the adjustment plan, his statement indicating that such objections are bottomed on his conviction that there was "no legal basis" for the plan. Mr. Clay conceded that the plan might have been a good one, and he made no charges against its proponents, who, he said, were entitled to have an opinion different from his. Thus Mr. Clay attacked the judicial proceeding, arguing that the proponents did not have in the plan a case to take to court. He thinks the proceeding has been "a fraud on the jurisdiction of the court" and that it "smells to heaven." When Senator Sparkman called his attention to the fact that the Supreme Court refused to review the case, Mr. Clay said that the McLaughlin act does not permit appeals from decisions of the three-judge courts which pass upon voluntary adjustment plans.

In response to questions from Senator Tobey, Mr. Clay said that the three-judge court made no effort to get facts other than those voluntarily presented to it by the interested parties. He also said that the R. F. C. loan as extended can only be paid off in proportional parts, and that R. F. C. is in a poorer position than it was prior to the extension. The witness added that it was difficult for him to understand why the R. F. C. followed a different policy with respect to its railroad loans generally than it did with respect to the loan to the B. & O. where "Mr. Jones' proteges" were employed.

Senator Fulbright suggested that the transaction "looks bad," if it were true, as

Mr. Clay indicated, that the B. & O. is not permitted to repay the R. F. C. except in stipulated amounts. Senator Tobey promised to present "interesting testimony" on that point. Senator Robertson thought that the committee had arrived with Mr. Clay at the point reached by the court when it told the witness that there was "no need to go further unless you are going to be more definite." Senator Tobey told his colleague from Virginia that the making of the case would be a "tedious process," but there have been some "surprising things" in the records being examined by the committee's staff.

**"Nothing to Conceal"**—The testimony of Mr. Sullivan of the R.F.C. Railroad Division was given in response to questions from Senator Tobey who first asked if there was anything the witness desired to conceal about the B. & O. loan. Mr. Sullivan was emphatic in replying that he had nothing to conceal. The senator then referred to a statement showing data on R. F. C. railroad loans, and read from it figures indicating that a total of \$664 million was involved in 62 such loans made between 1939 and 1947. The statement further indicated that \$520 million had been repaid, and Mr. Tobey calculated that the repayments in general averaged 80 per cent, while repayments by the B. & O. amounted to 7 per cent. He then asked Mr. Sullivan to explain this "discriminatory policy."

The witness replied that the B. & O. was arranging its refinancing plan, and R. F. C. expected that the plan would put it in a better position to secure repayment in full. Asked by the senator if all roads in debt to the R. F. C. were given the "same opportunity" to refinance, Mr. Sullivan replied that the same situation did not arise in other cases. And he refused to agree with Mr. Tobey's suggestion that the association of former R. F. C. men with the B. & O. had anything to do with the matter.

Chairman Goodloe of the R. F. C. read a statement addressed to the three issues which he said were raised by the committee's inquiry. As Mr. Goodloe stated them these issues are:

(I) Do the new B. & O. collateral trust bonds maturing in 1965 which R. F. C. agreed to accept in satisfaction of the loan notes held by it constitute an extension of the present B. & O. loans beyond January 1, 1955? If so, does such agreement violate section 3 of the Act of January 31, 1935?

(II) Was the B. & O. adjustment plan of 1944 desirable and in the public interest? Was it a good plan and one which was fair to R. F. C. and other B. & O. creditors?

(III) Was the B. & O.'s petition for relief under Chapter XV of the Bankruptcy Act, as amended (commonly known as the "McLaughlin act") filed with the court "in good faith" within the meaning of that term as used in the statute?

Mr. Goodloe called the first issue "a legal question pure and simple," which was "fully considered" by R. F. C. counsel and resolved in favor of the R. F. C. position.

With respect to the second issue, he pointed out that the adjustment plan was publicly announced more than two years ago; it received "widespread approval of the creditors voting on it"; it was approved by the I.C.C. and three-judge court; and review of the latter's determination was denied by the Supreme Court.

**Heart of the Inquiry**—The third issue listed above, i.e., the question of whether the adjustment plan was filed with the court "in good faith," is the "real thrust of the present inquiry," Mr. Goodloe said. Thus he discussed the matter at some length, noting that Mr. Clay's charges had been heard by the court; pointing out that no loss is anticipated on the R. F. C. loan as extended; denying that R. F. C. was in a position to exercise control of the B. & O.; dismissing as "untenable" any claim that R. F. C. was subject to criticism because the B. & O. used available funds to purchase its obligations to others at a discount; and commenting on the "Jones influence in R. F. C."

In the latter connection Mr. Goodloe conceded that "few important decisions" with respect to any R. F. C. matters were made without consulting Mr. Jones during the period when the latter was associated with the lending agency. "This we believe not only to have been proper but indeed precisely in accord with what the Congress of the United States itself contemplated and intended," Mr. Goodloe added. He went on to say that "it is a matter of common knowledge that between 1932 and 1945 the Congress of the United States on many occasions increased the authority and financial resources of R. F. C. because the Congress had unusual confidence in the integrity and ability of Mr. Jones."

### House Committee Staff

Andrew Stevenson, who served for nearly two years as director of the former War Production Board's Transportation Equipment Division, has recently joined the staff of the House committee on interstate and foreign commerce. He was appointed under those provisions of last year's congressional reorganization act which authorize committees to employ "professional staff members" to serve in an advisory capacity on legislative matters and to assist in handling committee business.

Kurt Borchardt, former counsel for the war contracts subcommittee of the Senate military affairs committee, and Arlin E. Stockburger, a former member of the Civil Aeronautics Administration's staff, are other recent appointees of the committee to similar positions. Meanwhile, John H. Frederick, a member of the faculty of the University of Maryland, who has been a member of the committee's staff for some time, continues in that position.

### Emergency Board Reports on L. & N. Dispatchers Case

Reporting on a dispute between the Louisville & Nashville and the American Train Dispatchers Association, a National Railway Labor Panel emergency board has recommended meeting the union's demand for enlargement of its representation contract's scope rule to cover the positions of chief dispatcher and night chief dispatcher. The board's report to President Truman was made public last week.

In making the foregoing recommendation, the board at the same time expressed its view that the carrier should retain the right to fill the chief-dispatcher positions with men that it thinks "best qualified with-

out regard to their seniority rights"; but the men so selected "should have the protection of other provisions of the present seniority rule of the agreement."

The railroad contended that the chief and night chief dispatchers were officials, and hence did not come within the definition of employee or subordinate official as contemplated by the Railway Labor Act. The union had a National Mediation Board certification extending its coverage of dispatchers to the disputed positions. Moreover, all parties agreed that an Interstate Commerce Commission order of February 5, 1924, in Ex Parte No. 72 was "the controlling order."

The I.C.C. order defined train dispatchers as follows: "This class shall include chief, assistant chief, trick, relief and extra dispatchers, excepting only such chief dispatchers as are actually in charge of dispatchers and telegraphers and in actual control over the movement of trains and related matters, and have substantially the authority of a superintendent with respect to those and other activities. This exception shall apply to not more than one chief dispatcher on any division."

The union's proposed new scope rule, the adoption of which was recommended by the board, is a verbatim copy of the I.C.C. definition, except that the term "night chief dispatcher" is added. The emergency board found that it was bound by the I.C.C. determination; and that the matter of whether disputed positions fell within the exception had been taken out of its hands ("if, indeed, it ever were there") by the N.M.B. certification that the dispatchers involved were represented by the union. "It is not for this board to review or pass upon actions of the Mediation Board in the performance of the functions assigned to it under the Railway Labor Act," the report added.

Members of the board were Ernest M. Tipton, chairman, John A. Fitch, and Walter Gilkyson.

### I. C. C. Hears More on Ship Rate Problem

(Continued from page 907)

Mr. Boyd said that the respondent railroads intend to give consideration to further adjustments of their "maximum rates on the same commodities" after the water lines either publish or publicly announce the rates they intend to establish between California ports and north coast ports. Such proposals, he said, would be covered by separate applications and handled in the regular manner with advice being given to the public as to what rates are being considered. "The railroads wish it clearly understood that they should be free, as they have been in the past, to make any necessary adjustments in rail rates as circumstances and conditions may warrant," he concluded.

Three officers of the United States Maritime Commission—G. E. Talmage, Jr., chairman of the Domestic Shipping Committee; R. C. King, chief, trade routes section, Research Division; and R. R. Doyle, chief, voyage cost control section, Operating Department—were among those to testify in support of the proposals of the Pacific water carriers.



**Terms Fleet Inadequate**—According to Mr. King, Pacific coastwise water traffic today is at a much lower level than prior to World War II. Declaring that the Pacific Coast rate structure is in need of much correction, he said that continuation of operations under present conditions "simply means that the rail carriers are now in a position practically to eliminate water common carrier service through continuation of unduly depressed rates." He added that the present fleet of 10 vessels is far below the peacetime commercial requirements of Pacific coastwise trade and is "wholly inadequate" as a ready reserve fleet to aid the armed forces in time of an emergency.

Mr. King attributed the low level of Pacific coastwise water traffic to the Fourth Section relief granted the railroads by the commission and to the railroad rate adjustments in which he said the Fourth Section relief was disregarded. Mr. King said that the relief granted the railroads was predicated on conditions prevailing in the late 1920's and early 1930's, at which time, he added, operating costs were "substantially lower" than today.

Emphasizing that the M. C.'s authority to operate as a water carrier on domestic routes is scheduled to expire June 30, Mr. Talmage said that the railroad proposal would afford "some measure of emergency relief" to the water carriers. "To the extent that any portion of the relief sought under the proposals is denied, there will, we believe, be a resulting curtailment of service," Mr. Talmage added in part. "The Maritime Commission has reiterated the prediction that present conditions, unless promptly corrected, would cause the abandonment of many old and established routes and service. To a large extent, that has already occurred. . . . Moreover, we can see little possibility of a material revival of shipping on those routes in the foreseeable future."

The Pacific water carriers' views were summarized by C. R. Nickerson, secretary of the Pacific Coastwise Conference, and R. F. Burley, who represented the conference and the Pacific Coastwise Freight Traffic Bureau. Both offered extensive testimony and exhibits in support of the ship lines' proposal to increase all rates wherever possible by 50 per cent above the June 30, 1946, level, and to add to such increased rates the additional increases authorized by the commission in Ex Parte No. 162.

Testimony by E. C. Pierre, a member of the standing rate committee of the Trans-Continental Freight Bureau, marked the conclusion of the Washington hearings in the Docket Nos. 29663, 29664 and 29708 proceedings. These proceedings pertain respectively to transcontinental rail rates, intercoastal water rates and all-water, water-rail and rail-water rates between Pacific coast ports and interior points.

Mr. Pierre also told the commission that the railroads "wish it clearly understood that they should be free, as they have in the past, to make any necessary adjustments in the rail rates as circumstances and conditions may warrant." As noted in *Railway Age*, April 12, page 765, the railroads have offered to raise transcontinental rates on the commodities involved by the

full 25 per cent increase sought but not granted in Ex Parte No. 162.

Mr. Pierre added that "further consideration" must be given to the all-rail rates should the I. C. C. authorize the railroads to publish their proposed increases. "In making this proposal," he said, "the rail lines recognize that there will be instances where such transcontinental rates will have to be further adjusted because of relationships between producers or receivers located in different transcontinental rate groups. Furthermore, competition between shippers who have available to them transcontinental rates with shippers located at intermediate points where rates would become lower than those applicable to transcontinental traffic must be given consideration."

In addition to Mr. Pierre, others who testified at the concluding sessions of the hearing included C. Y. Roberts and Odell Kominers, representing the Gulf Intercoastal Conference, and W. M. Carney, representing the Intercoastal Steamship Freight Association. These witnesses introduced additional testimony and exhibits in support of an earlier presentation by H. S. Brown, chairman of the I. S. F. A., as reported in *Railway Age*, April 26, page 864.

The commission also received from the Secretary of Agriculture an objection to a motion of the I. S. F. A. and G. I. C., asking the commission to deny the water carriers' request to include certain additional commodities within the scope of the Docket Nos. 29663 and 29644 proceedings.

### Rates on War Freight Assailed in Complaint

(Continued from page 908)

millions of carloads of military and naval freight be temporarily stored at interior points en route to the ports for export to the fighting fronts, and it is our view that the domestic rates should not have been applied on these shipments. It is possible that recovery in this single suit could run into millions of dollars."

David O. Mathews, special assistant to the attorney general, estimated a little more specifically that "approximately a billion dollars" might be recovered as a result of the foregoing complaint when he testified recently on a proposed appropriation which the Department of Justice is seeking for the purpose of prosecuting this and other reparations cases. All such cases might return to the government as much as two billion dollars, Mr. Mathews also said.

His testimony was given April 16 at a House appropriations subcommittee hearing on H. R. 3245, the Second Deficiency Appropriations Bill for the current fiscal year, which was reported to the House on April 29. The Department of Justice asked \$60,500 for the reparations work, but the reported bill allows only \$30,000. Mr. Mathews' testimony revealed that \$50,000 has already been received for the work from the "emergency funds" of the President.

When Mr. Mathews gave his estimate of a billion-dollar recovery from the present case, the committee's chairman, Representative Taber, Republican of New York,

observed that "there aren't very many railroads where you could take and add up their assets and you could recover and get a billion dollars." Mr. Mathews pointed out that the complaint has been brought "against all the railroads of the nation, 896." He also indicated that two more complaints would be filed in the near future.

In the course of his questioning of Mr. Mathews, Representative Mahon, Democrat of Texas, observed that he had been "amazed" at the "hundreds of millions of dollars" that have been appropriated for transportation by the Army. "I would like to know, myself, if we have been high-jacked on some of this," the Texan added.

### Arizona Intrastate Rates

Acting upon a petition of railroads operating in that state, the Interstate Commerce Commission has instituted an investigation into certain Arizona intrastate freight rates required by the Arizona Corporation Commission which has refused to authorize adjustments in line with the Ex Parte 162 increases on interstate traffic. The proceeding is docketed as No. 29729, and the intrastate rates involved are those on ores and concentrates, sulphuric acid, lime rock, and raw products of agriculture, including livestock.

### Representation of Employees

Because no organization or individual received a majority of the legal votes cast, the National Mediation Board was unable to make a representation certification with respect to Great Northern yardmen following a recent election in which the Brotherhood of Railroad Trainmen received 671 votes while the Switchmen's Union of North America received 646. The latter union, which represented the yardmen at the time the election was held, continues in that role.

As the result of other elections which have been certified by the N.M.B., the Railroad Yardmasters of America supplanted the B. of R.T. as representative of stationmasters employed by the Richmond Terminal, and the Joint Council Dining Car Employees of the Hotel & Restaurant Employees International Alliance replaced the United Transport Service Employees of America, Congress of Industrial Organizations, as representative of Florida East Coast train attendants and train maids.

### Three Judges Must Sit on Three-Judge Courts

The Supreme Court ruled this week that three judges must participate in decisions of special three-judge courts created to review orders of the Interstate Commerce Commission. The case was before the Supreme Court on an appeal which challenged the validity of a determination made by two members of a three-judge court after the third member had become unable to continue serving because of illness.

The Supreme Court's ruling that the action of the two judges was invalid was embodied in an opinion delivered by Justice Murphy with the dissent of Justice Rutledge noted. The case involved the commission's decision in *Coal to Beloit, Wis.*,

and Northern Illinois, 263 I. C. C. 179, and appellants included the Chicago, Milwaukee, St. Paul & Pacific, the lower court having upheld the commission's finding that undue preference to shippers over intrastate Illinois routes would result from proposed increases in interstate rates on coal from mines in Indiana to Rockford, Ill., and other destinations in northern Illinois.

### White Leaving O. D. T.; He and Kirk Going to Turkey

Joseph L. White, executive officer of the Office of Defense Transportation, has resigned to accept a position as consultant with the Turkish railroads. He will be advisor on matters relating to accounting, statistics and rates, while the position of adviser on operating matters has been accepted by W. F. Kirk, former western director for O. D. T.

Messrs. White and Kirk will sail for Turkey about the middle of this month. The former's duties at O. D. T. will be assumed by C. L. Harrison, who has been assistant to the director of the Interstate Commerce Commission's Bureau of Service.

### C. of N. J. Rate Hearing

The Interstate Commerce Commission will continue hearings May 5 in the I. & S. No. 5488 proceeding, in order to receive evidence from the Central of New Jersey, which together with the Reading seeks to increase its commutation fares between points in Pennsylvania and New Jersey and between points in those states and New York City. The hearing will be held at the Hotel St. George, Brooklyn, N. Y., before Commissioner Rogers and Examiner Fuller. (See *Railway Age*, April 26, pages 862 and 868.)

### Congressmen Hold Meeting on Cars; Faricy Replies

Congressmen representing states west of the Mississippi river met on April 28 in "emergency caucus" to hear what Representative King, Democrat of California, called a report revealing "one of the most alarming situations ever uncovered respecting railroad manipulations [of the freight car supply] to the detriment of the entire West. The report was made by Milton C. Phinney, a reporter for the Los Angeles Daily News, which recently published results of a car-shortage survey made by him.

The result of the caucus was the appointment of a committee, headed by Representative King, to confer with President Truman about the matter. The statements made at the meeting by Mr. King and Reporter Phinney brought a prompt reply from William T. Faricy, president of the Association of American Railroads. Mr. Faricy had previously made a reply to the News article. When that reply was reported in the *Railway Age* of April 19, page 803, it was stated erroneously that the article had appeared in the Los Angeles Times.

"One-Sided"—"Statements made today to a meeting of western congressmen that

the Association of American Railroads discriminates against the West in the distribution of available freight cars, present a partial, one-sided and untrue picture of the situation," Mr. Faricy said this time.

"The statements," he continued, "are based primarily on the regular car location reports of the A. A. R.'s Car Service Division, which show that there are more box cars in the East than are owned by eastern railroads. That is true. It is equally true, though not mentioned at the meeting, that there are more open-top cars in the West than are owned by western railroads. Both situations are normal in times of active business, and neither reflects any discrimination or preferment of either section.

"It is not true, as was stated, that eastern railroads have on their lines 110 per cent of their ownership of all cars. The comparative figures are that on March 15, the date referred to, eastern railroads had on line 95.3 per cent of their ownership of all cars, while western railroads had 98.6 per cent. The fact is that the freight car situation is national and it is being dealt with on a national and not a sectional basis. The association would be glad to present the facts as to this before the appropriate committee of Congress representative of all sections of the country.

"It was also stated at today's meeting that the car shortage in the West could be cured by restoration to full force of the Car Service Rules, which have been partially in abeyance during the war and since. Actually the present handling of box cars is designed to speed up the return flow of such cars to the West by requiring eastern railroads under Car Service Division orders to move them west by the most direct routes, and in many cases in solid trainloads of empties.

**Another Investigation?**—"The railroads which are carrying the heaviest burden in this connection are the eastern railroads. The charge that they dominate the A. A. R. in their own interest and against the interest of the West, is absolutely untrue. . . . The business of the association is to distribute the available cars as equitably and efficiently as is possible, without regard to sectional or individual railroad interest, and that is what is being done. The great volume of freight which the railroads are now carrying for each car in service demonstrates the efficiency of present car distribution."

Meanwhile, the Senate has received a resolution calling for an investigation of the freight-car situation by its committee on interstate and foreign commerce. It is S. Res. 107, introduced by Senator Downey of California for himself and Senators Magnuson of Washington, McFarland of Arizona, and Johnson of Colorado, Democrats.

The resolution would direct the committee to make a study "with respect to the authority and administrative policies" of the Car Service Division in the distribution of freight cars "to serve the commerce and industries of the Pacific Coast and Rocky Mountain states, including any contiguous states affected by the current critical shortages of such equipment." Also,

the committee would be instructed to determine whether the Interstate Commerce Commission has permitted the A. A. R. "to assume the duties and responsibilities imposed upon the commission by Congress with respect to the distribution of freight cars among the various railroads and geographic areas of the country"; and to ascertain whether the A. A. R. is "dominated by particular railroads to an extent which would interfere with the proper and impartial exercise of such duties and responsibilities."

### Reed Financial-Revamp Bill Introduced in House

Representative Reed, Republican of Illinois, is again sponsoring legislation to set up procedures short of bankruptcy for the readjustment of railroad financial structures, including provisions applying such procedures on a mandatory basis to certain roads already undergoing reorganization as well as on a voluntary basis to all roads not yet in the hands of the courts. The proposed legislation is embodied in H. R. 3237, a bill introduced in the House by Mr. Reed on April 28.

A similar bill, sponsored by Mr. Reed and former Senator Wheeler of Montana, was passed by Congress last year only to be "pocket-vetted" by President Truman. However, the President issued a "memorandum of disapproval," indicating that he might be disposed to approve a bill that did not contain provisions of the Reed-Wheeler measure which he considered objectionable.

In general the Reed bill, like its predecessor, proposes to reestablish in modified and amplified form the voluntary readjustment procedures of the former McLaughlin act, which expired November 1, 1945. The principal change from that former law would make the I. C. C. instead of the courts the principal arbiter in the framing of voluntary reorganization plans. There are, however, provisions for appeal from commission determinations.

A carrier undergoing reorganization would come under the bill's provisions if, during the seven calendar years from 1939 to 1945, inclusive, its fixed charges had been covered by income as measured by a formula set out in the bill. The formula would add to the reported net income any amounts reported as a deficit for fixed charges to the extent of any amounts reported for federal income and excess profits taxes in the same years, and any amounts deducted in any year for the amortization of defense projects in excess of 20 per cent of the cost of such facilities. Also, the formula's fixed-charge figure would exclude inter-company obligations.

Roads undergoing reorganization which met this test would have their reorganization proceedings suspended, and they would be required to apply to the commission for a non-bankruptcy readjustment of their financial structures. In the meantime services of trustees would have been terminated and the property placed in control of a new board of directors elected at a special meeting of stockholders to be held within 60 days after the effective date of the act.

(Continued on page 914)



# THE NEW YORK CENTRAL RAILROAD COMPANY

## EXCERPTS FROM ANNUAL REPORT—FOR THE YEAR 1946.

### REVIEW OF THE YEAR:

For the New York Central the year was one of "profitless prosperity." The volume of our freight traffic exceeded that of any previous peace time year. Passenger traffic was never greater except in the war years 1943, 1944 and 1945. Despite this record of performance, the year's operations resulted in a deficit of \$10,449,268. Had we not been able to avail ourselves of "carry-back" tax credits, the amount of this deficit would have been \$31,591,568.

We do not have to look far to find the reasons. The rates and fares which we were permitted to charge produced average revenue only 10 per cent above the 1939 level for transporting a ton of freight a distance of one mile, while the average revenue for transporting a passenger a distance of one mile declined almost one per cent. By contrast, the cost of wages, materials and supplies during the same period increased more than 50 per cent.

Throughout the year greatly disturbed labor conditions in most major industries, including the railroads, seriously interrupted the orderly flow of freight traffic, contributing to the difficulty of handling efficiently the great volume which made up the year's business. These same conditions delaying the delivery of new passenger and freight cars and locomotives, as well as other materials urgently required in the improvement of plant and facilities, retarded the development of high standards planned in New York Central service.

### IN THE PUBLIC SERVICE

To serve the public adequately in the field of transportation is the principal objective of our business. Management recognizes that it must provide progressively better transportation at the lowest possible cost to the public. Our record over the years demonstrates adherence to this aim.

In 1946 the average revenue for transporting a ton of freight a distance of one mile was 1.02 cents, while the average revenue for transporting a passenger a distance of one mile was 2.10 cents.

During the last fifteen years the average revenue per ton mile for movement of freight has varied but slightly from year to year, the average for the full period being 9.24 mills. During this same period the average revenue per passenger mile has shown a downward trend from a high of 2.64 cents in 1932 to 2.10 cents in 1946, the average over the whole period being 2.07 cents. Contrasted with the costs which the public must pay for other things, this record is noteworthy.

Freight traffic in 1946, measured by the number of tons moved one mile, totaled 40,215,577,150 ton miles, or 9.3 per cent less than in the previous year. Passenger traffic, measured by the number of passengers carried one mile, was 7,046,346,183 passenger miles, or 19.8 per cent less than in 1945.

Total operating revenues were 5.7 per cent lower than in 1945. The decline in freight revenue was 2.3 per cent and in passenger revenue 12.6 per cent. Other operating revenue declined 10.3 per cent.

Railway operating expenses were lower than in 1945 by \$22,329,477, or 3.8 per cent. Operating expenses for 1945, however, included abnormally heavy amortization charges. Excluding amortization charges

from the accounts for both years, other expenses of operation showed a net increase in 1946 of \$33,370,896 after taking into account an increase of approximately \$68,000,000 in the cost of labor and materials.

Railway tax accruals totaled \$45,095,709, of which \$22,801,651 were payroll taxes for retirement and unemployment benefits to employees. Recent amendment of the Federal act imposing these taxes substantially increases the rate payable in 1947. After credit amounting to \$21,142,300, which we were enabled to take for a certain proportion of Federal income taxes paid in previous years, the net amount of railway tax accruals for the year was \$23,953,409. No further credit in this respect will be available.

Our plans are pointed to newer and higher standards for the public service. Following comprehensive studies of the situation, the New York Central as far back as 1944 began placing orders with manufacturers for new passenger train cars in its program to modernize its great fleet of passenger trains. Orders placed then and subsequently call for a total of 720 new cars, enough completely to re-equip 52 trains, at an estimated cost of \$59,000,000. Included are sleeping cars, coaches, dining cars, lounge cars and baggage cars, all designed to give superior modern service. At the end of the year, 196 of these new coaches and 29 baggage cars had been received and placed in service.

Freight train cars available include many thousands of modern designs and construction. Since the end of 1941, 14,027 new cars, costing \$42,120,689 and having an aggregate carrying capacity of 814,584 tons, have been placed in service. Among these are boxcars equipped with high-speed trucks and brakes, loading devices and other features for expediting freight service, and hopper cars with protective covering for the economical movement in bulk of cement and other commodities usually packaged for shipment. At the end of 1946 we had on order with manufacturers 2,000 additional freight train cars, estimated to cost \$8,740,000.

### OUR GENERATOR—INVESTED CAPITAL

The New York Central has always fully discharged its obligations to those investors from whom it borrowed money. The rates of interest paid for the use of this money have not been high. Currently the average annual interest on our borrowings is at the rate of 3.7 per cent.

The steady reduction of the outstanding debt of the Company and its lessor companies continued in 1946, despite the necessity of financing sizable acquisitions of new equipment and further expenditures in connection with the grade crossing elimination program in New York State. The gross reduction during the year in bonds, equipment trust certificates and other capital obligations in the hands of the public and in amounts payable to the State of New York on account of grade crossing elimination, totaled \$24,583,195. Partially offsetting this reduction were the issue and sale of \$17,700,000 of equipment trust certificates, representing a part of the purchase price of new equipment, and further advances of \$691,730 by New York State in connection with elimination of grade

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crossings. Thus, at the year's end, total debt represented by capital obligations outstanding of the Company and its lessor companies, was \$849,222,067, compared with \$855,406,432 at the end of 1945, a net reduction of \$6,184,465.

Since the end of 1932 there has been a net reduction of \$259,585,886, or 23.4 per cent, in the total outstanding amount of capital obligations of the Company and its lessor companies. Interest computed on an annual basis, on such obligations outstanding at the end of 1946, was \$14,584,895 less than on those outstanding at the end of 1932, a reduction of 30.8 per cent.

The stockholders of the Company in many years have failed to receive any dividends whatever. The total amount paid to them in dividends since 1931 would be equal to a return of only three-tenths of one per cent per annum upon the investment in capital stock plus the accumulated surplus which has been retained in the business.

It is quite apparent from the record that the benefits growing out of the large sum of money invested in the New York Central have accrued largely to the public in low-cost transportation and to employees in better wages and working conditions. On the other hand, the meagre return to the stockholders suggests strongly the need for a better balance in this respect. Public policy largely governs this situation.

### THE FUTURE

Traffic prospects for 1947 are good. It is expected that the volume of freight traffic will continue at about the same high level experienced in 1946, with some decline, however, in passenger traffic. Revenues will be favorably influenced by the 17.9 per cent increase in freight rates which became effective January 1, 1947, and the continuance of the 10 per cent increase in passenger fares.

With new motive power and equipment, with improvements to plant and with new efficiencies, our whole organization is prepared to provide modern service which will, we believe, commend itself to the public.

During the year 1946 locations on the lines of the Company and its affiliated railroads were selected for 546 additional industrial plants. Many of these industries have constructed or plan to construct new plants, while others have acquired existing facilities heretofore idle. These new industrial plants, large and small, will constitute important sources of future traffic, estimated at approximately 205,000 cars annually.

In the competitive field we are still faced with the subsidization of other transport agencies. The opportunity of the railroads to earn a reasonable return, even with the high level of traffic anticipated, is seriously impaired by continuance of these subsidies.

Governmental action to equalize competitive conditions in the transportation field is urgently needed. There appears to be a growing awareness on the part of the public of the importance of dealing with this situation constructively and it is hoped that corrective action will not be long deferred.

For copy of Annual Report containing Comparative Income Account, Balance Sheet, etc., address Public Relations Dept., New York Central System, 466 Lexington Avenue, New York 17, N. Y.

(Continued from page 912)

If an adjustment plan had not been consummated within a year after the filing of an application with it, the commission could formulate a plan for submission to holders of affected obligations.

Meanwhile, on the Senate side, the committee on interstate and foreign commerce last week referred to a subcommittee the bill (S. 290) which would also reestablish voluntary adjustment procedures along the foregoing lines, but would limit their applicability to roads not undergoing reorganization. The subcommittee is headed by Senator Reed, Republican of Kansas.

### O. D. T. Submits Budget for Another Year

The Office of Defense Transportation has submitted to the Bureau of the Budget an estimate of the money it would require to continue functioning for another year beyond next June 30. When present appropriations were made it was contemplated that O. D. T. would wind up its affairs by the end of the current fiscal year.

It was stated at O. D. T. that Director J. Monroe Johnson had made no recommendation that the agency be continued, but the new budget estimate was requested by President Truman in view of the continuing car shortage.

### New Radio Rules

The Federal Communications Commission has made public a number of proposed amendments to its regulations and requirements in Docket No. 8294, Experimental, Miscellaneous, Railroad and Utility Radio Services. The notice stated that any interested party may file objections with the F. C. C. in writing on or before May 20.

### Starts Investigation of R. E. A. Revenue Apportionment Plan

The Interstate Commerce Commission has instituted an investigation into the Railway Express Agency's present plan for the apportionment of its revenues among the railroads. The proceeding is docketed as No. 29679, and it has been assigned for hearing June 3 at Washington, D. C., before Examiner Leonard Way.

The order of investigation is an aftermath of the commission's Ex Parte 163 express-rate decision of October 28, 1946, which included extended comment on the apportionment plan, suggesting that it was "apparently" in violation of section 5(1) of the Interstate Commerce Act. As noted in the *Railway Age* of November 2, 1946, page 738, the plan was adopted in 1938 as a modification of the plan originally installed in 1929 when the railroads set up R. E. A. as their affiliate to take over the express business.

The commission's rate report took the position that the only plan of apportionment which the commission had approved was the one it sanctioned in 1929 when it was authorizing the whole R. E. A. set-up. The supplemental agreement of 1938 was not filed with the commission until after the Ex Parte 163 hearings, and R. E. A. has since asked the commission to find that the arrangement does not require specific approval

—or, in the alternative, to approve the plan if it be determined that such action is required (see *Railway Age* of December 21, 1946, page 1062).

### Hearings on Bus Fares

The Interstate Commerce Commission has issued a new schedule of hearings in connection with its No. MC-C-550 investigation of bus fares. The order cancels the hearings heretofore assigned for June 9 and November 17 at Washington, D. C., August 4 at San Francisco, Calif., and September 15 at Chicago, and sets out the new schedule as follows:

June 13: Commission's office, Washington, D. C.  
June 16: New Post Office building, Boston, Mass.

August 25: Olympic Hotel, Seattle, Wash.

September 2: Post Office building, San Francisco, Calif.

October 6: Office of Georgia Public Service Commission, Atlanta, Ga.

October 13: Baker Hotel, Dallas, Tex.

November 3: Sherman Hotel, Chicago.

December 15: Commission's office, Washington, D. C.

Additional government agency news appears on page 925.

## Equipment and Supplies

### Domestic Equipment Orders Reported in April

Orders by domestic railroads for 41 Diesel-electric locomotives and 6,785 freight cars, including 1,300 ordered from railroad shops, were reported in the *Railway Age* in April. No orders for passenger cars were reported. The estimated cost of the locomotives is \$6,450,000 and the freight cars will cost an estimated \$26,452,000. The accompanying table lists the orders in detail.

Domestic orders have been reported by the *Railway Age* during the first four months of 1947 for 120 Diesel-electric, 1 gas turbine, 4 electric and 10 steam locomotives (at an estimated cost of \$37,150,000), 36,828 freight-train cars (costing an estimated \$143,622,000), and 138 passenger-train cars (the estimated cost of which is \$14,025,000).

| LOCOMOTIVES  |                           |       |                         |
|--------------|---------------------------|-------|-------------------------|
| Date         | Purchaser                 | No.   | Type                    |
| April 5      | C. I. & L.                | 7     | 1,500-hp. D.-E. rd. sw. |
|              |                           | 6     | 1,500-hp. D.-E. rd. sw. |
|              |                           | 2     | 1,500-hp. D.-E. rd. sw. |
| April 5      | C. M. St. P. & P.         | 4     | 2,000-hp. D.-E. A units |
| April 5      | K. C. S.                  | 2     | 2,000-hp. D.-E. A units |
| April 26     | Bangor & Aroostook        | 12    | 1,500-hp. D.-E. frt.    |
| April 26     | M. St. P. & S. Ste. M.    | 8     | 1,500-hp. D.-E. rd. sw. |
| FREIGHT CARS |                           |       |                         |
| April 12     | D. & R. G. W.             | 500   | 50-ton Gondola          |
| April 19     | C. & N. W.                | 1,000 | 50-ton Box              |
|              | For the C. St. P. M. & O. | 400   | 50-ton Box              |
| April 19     | D. & M.                   | 25    | 70-ton Hopper           |
|              |                           | 10    | 70-ton Cov. Hopper      |
| April 19     | K. C. S.                  | 400   | 50-ton Box              |
| April 19     | N. P.                     | 1,000 | 50-ton Box              |
| April 19     | Southern                  | 150   | 70-ton Cov. Hopper      |
| April 19     | Wabash                    | 300   | 50-ton Box              |
| April 26     | C. & O.                   | 3,000 | 70-ton Hopper           |
|              |                           |       | Pressed Steel           |
|              |                           |       | Amer. Car & Fdy.        |
|              |                           |       | Amer. Car & Fdy.        |
|              |                           |       | General American        |
|              |                           |       | General American        |
|              |                           |       | Pullman-Standard        |
|              |                           |       | R. R. Shops             |
|              |                           |       | Pullman-Standard        |
|              |                           |       | R. R. Shops             |
|              |                           |       | Amer. Car & Fdy.        |

### FREIGHT CARS

The CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC is inquiring for 1,000 50-ton hopper cars, 250 70-ton hopper cars and 250 50-ton gondola cars.

The PITTSBURGH & SHAWMUT has ordered 200 50-ton steel hopper cars from the Pressed Steel Car Company

### LOCOMOTIVES

#### New York Central Orders 70 Diesel-electric Units

The New York Central has placed orders for 70 Diesel-electric locomotive units at a cost of \$12,000,000. Of the total, 2,000-hp. freight units will be built by Fairbanks, Morse & Co., 12 2,000-hp. passenger and 18 1,500-hp. freight units will be built by the Electro-Motive Division of General Motors Corporation, 6 1,500-hp. freight and 2 1,500-hp. road-switching units by Baldwin Locomotive Works and 17 1,500-hp. freight units, 9 1,000-hp. and 2 1,500-hp. road-switching units and 2,000-hp. passenger units by the American Locomotive Company.

Delivery of this equipment is expected this year, the New York Central said. The passenger and freight units will be utilized in various combinations to provide 1,500 to 6,000 hp. The road-switching units will be used in way freight train service. Eight of the passenger units and 28 of the freight units will be of the A type. Of the remaining units, 8 for passenger service and 13 for freight service are of the B type, which must be operated in combinations.

The report in the April 5 issue of the *Railway Age* that the KANSAS CITY SOUTHERN had ordered four 2,000-hp Diesel-electric A units from Fairbanks, Morse & Co. was incorrect inasmuch as the K.C.S. had actually received delivery of two such units and had ordered two more.

### SIGNALING

The BOSTON & MAINE has placed orders with the Union Switch & Signal Co. for four Model 31 electro-pneumatic car retarders, totaling approximately 421 rail feet of retardation. These retarders will be installed in the classification yards at Mystic Junction, Boston, Mass.

The NORFOLK & WESTERN has placed an order with the Union Switch & Signal Co. covering the materials required for  
(Continued on page 918)



# UNION PACIFIC RAILROAD COMPANY

## Fiftieth Annual Report—Year Ended December 31, 1946

TO THE STOCKHOLDERS OF UNION PACIFIC RAILROAD COMPANY:

The Board of Directors submits the following report for the year ended December 31, 1946, for the Union Pacific Railroad Company, including Oregon Short Line Railroad Company, Oregon-Washington Railroad & Navigation Company, Los Angeles & Salt Lake Railroad Company and the St. Joseph and Grand Island Railway Company, whose properties are leased to

the Union Pacific Railroad Company. The lessor companies have certain income, and charges, and the figures in the Income Account, other than those relating to transportation operations, and in the Surplus Account and General Balance Sheet and tabulations and tables relating thereto are stated on a consolidated basis, *excluding offsetting accounts between the companies.*

### Income

The operated mileage at close of year and income for the year 1946, compared with 1945, were as follows:

|   | 1946                   | 1945                   | INCREASE       | DECREASE              |
|---|------------------------|------------------------|----------------|-----------------------|
| <b>Operated Mileage at Close of Year</b>  |                        |                        |                |                       |
| Miles of road   | 9,774.91               | 9,777.38               |                | 2.47                  |
| Miles of additional main track  | 1,531.45               | 1,531.29               | .16            |                       |
| Miles of yard tracks and sidings  | 4,490.59               | 4,480.41               | 10.18          |                       |
| <b>Total Mileage Operated</b>   | <b>15,796.95</b>       | <b>15,789.08</b>       | <b>7.87</b>    |                       |
| <b>Transportation Operations</b>  |                        |                        |                |                       |
| Operating revenues  | \$361,395,534.29       | \$491,877,872.15       |                | \$130,482,337.86      |
| Operating expenses  | 286,809,739.61         | 362,286,584.09         |                | 75,476,844.48         |
| Revenues over expenses  | \$74,585,794.68        | \$129,591,288.06       |                | \$55,005,493.38       |
| Taxes   | 35,403,648.23          | 84,536,069.79          |                | 49,132,421.56         |
| <b>Railway Operating Income</b>   | <b>\$39,182,146.45</b> | <b>\$45,055,218.27</b> |                | <b>\$5,873,071.82</b> |
| Rents from use of joint tracks, yards, and terminal facilities                  | 1,816,712.47           | 1,942,090.21           |                | 125,377.74            |
|   | \$40,998,858.92        | \$46,997,308.48        |                | \$5,998,449.56        |
| Hire of equipment—debit balance   | \$10,999,214.01        | \$12,609,545.29        |                | \$1,610,331.28        |
| Rents for use of joint tracks, yards, and terminal facilities                   | 3,046,293.10           | 3,280,210.54           |                | 233,917.44            |
|   | \$14,045,507.11        | \$15,889,755.83        |                | \$1,844,248.72        |
| <b>Net Income from Transportation Operations</b>                                | <b>\$26,953,351.81</b> | <b>\$31,107,552.65</b> |                | <b>\$4,154,200.84</b> |
| <b>Income from Investments and Sources other than Transportation Operations</b> |                        |                        |                |                       |
| Income from oil and gas operations—net  | \$6,621,631.34         | \$6,172,237.69         | \$449,393.65   |                       |
| Dividends on stocks owned   | 2,913,483.50           | 4,233,693.50           |                | \$1,320,210.00        |
| Interest on bonds and notes owned   | 1,029,556.89           | 1,190,718.22           |                | 161,161.33            |
| *Income from unfunded securities and accounts                                   | 2,501,987.80           | 2,190,710.75           | 311,277.05     |                       |
| Rents from lease of road and equipment  | 315,029.74             | 151,883.87             | 163,145.87     |                       |
| Miscellaneous rents   | 510,356.02             | 469,359.93             | 40,996.09      |                       |
| Miscellaneous income  | 1,906,345.09           | 2,187,289.95           |                | 280,944.86            |
| <b>Total</b>  | <b>\$15,798,390.38</b> | <b>\$16,595,893.91</b> |                | <b>\$797,503.53</b>   |
| <b>Total Income</b>   | <b>\$42,751,742.19</b> | <b>\$47,703,446.56</b> |                | <b>\$4,951,704.37</b> |
| <b>Fixed and Other Charges</b>  |                        |                        |                |                       |
| Interest on funded debt   | \$11,384,595.08        | \$13,505,867.01        |                | \$2,121,271.93        |
| Interest on unfunded debt   | 365,187.93             | 391,769.61             |                | 26,581.68             |
| Miscellaneous rents   | 32,053.33              | 51,969.38              |                | 19,916.05             |
| Miscellaneous charges   | 538,302.57             | 722,260.68             |                | 183,958.11            |
| <b>Total</b>  | <b>\$12,320,138.91</b> | <b>\$14,671,866.68</b> |                | <b>\$2,351,727.77</b> |
| <b>Net Income from All Sources</b>  | <b>\$30,431,603.28</b> | <b>\$33,031,579.88</b> |                | <b>\$2,599,976.60</b> |
| Released from "Reserve against possible refunds on U. S. Government shipments"  | 3,780,134.95           | 1,618,699.29           | 2,161,435.66   |                       |
| <b>Total for Disposition</b>  | <b>\$34,211,738.23</b> | <b>\$34,650,279.17</b> |                | <b>\$438,540.94</b>   |
| <b>DISPOSITION</b>  |                        |                        |                |                       |
| <b>Dividends on Stock of Union Pacific Railroad Co.:</b>                        |                        |                        |                |                       |
| Preferred stock:  |                        |                        |                |                       |
| 2 per cent paid April 1, 1946   | \$1,990,862.00         |                        |                |                       |
| 2 per cent paid October 1, 1946   | 1,990,862.00           | \$3,981,724.00         | \$3,981,724.00 |                       |
| Common stock:   |                        |                        |                |                       |
| 1½ per cent paid April 1, 1946  | \$3,334,365.00         |                        |                |                       |
| 1½ per cent paid July 1, 1946   | 3,334,365.00           |                        |                |                       |
| 1½ per cent paid October 1, 1946  | 3,334,365.00           |                        |                |                       |
| 1½ per cent payable January 2, 1947   | 3,334,365.00           | 13,337,460.00          | 13,337,460.00  |                       |
| <b>Total Dividends</b>  | <b>\$17,319,184.00</b> | <b>\$17,319,184.00</b> |                |                       |
| <b>Transferred to Earned Surplus—Unappropriated</b>                             | <b>\$16,892,554.23</b> | <b>\$17,331,095.17</b> |                | <b>\$438,540.94</b>   |

\* Includes interest on short-term U. S. Government obligations carried in balance sheet account, "Temporary cash investments."

### Expenditures Chargeable to Investment in Road and Equipment Property:

|   |                        |  |                        |
|---|------------------------|--|------------------------|
| Additions and Betterments (excluding equipment)       | \$ 5,817,507.47        | Cost of equipment retired  | 5,362,640.69           |
| Equipment   | 16,995,281.89          | <b>Total Credits</b>   | <b>6,470,026.83</b>    |
| <b>Total Expenditures</b>                             | <b>\$22,812,789.36</b> | <b>Net increase in investment in "Road and Equipment Property"</b> | <b>\$16,342,762.53</b> |
| Credits to investment in Road and Equipment Property: |                        |  |                        |
| Cost of property retired and not replaced             | \$ 1,107,386.14        |  |                        |

# Operating Results for Year 1946 Compared with Year 1945:

|  | 1946<br>9,775.33 | 1945<br>9,779.41 | INCREASE<br>..... | DECREASE<br>4.08 | Per<br>Cent<br>.... |
|--|------------------|------------------|-------------------|------------------|---------------------|
| Average miles of road operated .....     |                  |                  |                   |                  |                     |
| OPERATING REVENUES                       |                  |                  |                   |                  |                     |
| Freight .....                            | \$263,825,662.84 | \$355,546,157.57 | .....             | \$91,720,494.73  | 25.8                |
| Passenger .....                          | 64,767,862.71    | 96,370,042.20    | .....             | 31,602,179.49    | 32.8                |
| Mail .....                               | 7,928,255.67     | 8,800,411.65     | .....             | 872,155.98       | 9.9                 |
| Express .....                            | 6,420,630.93     | 8,642,899.91     | .....             | 2,222,268.98     | 25.7                |
| Other Passenger-Train .....              | 8,321,134.77     | 10,455,930.00    | .....             | 2,134,795.23     | 20.4                |
| Switching .....                          | 2,732,891.12     | 2,768,377.50     | .....             | 35,486.38        | 1.3                 |
| Other .....                              | 7,399,096.25     | 9,294,053.32     | .....             | 1,894,957.07     | 20.4                |
| Total operating revenues .....           | \$361,395,534.29 | \$491,877,872.15 | .....             | \$130,482,337.86 | 26.5                |
| OPERATING EXPENSES                       |                  |                  |                   |                  |                     |
| *Maintenance of way and structures ..... | \$46,576,730.42  | \$69,794,445.10  | .....             | \$23,217,714.68  | 33.3                |
| *Maintenance of equipment .....          | 69,235,048.90    | 117,834,077.49   | .....             | 48,599,028.59    | 41.2                |
| Total maintenance .....                  | \$115,811,779.32 | \$187,628,522.59 | .....             | \$71,816,743.27  | 38.3                |
| Traffic .....                            | 7,880,227.66     | 7,538,714.08     | \$341,513.58      | .....            | 4.5                 |
| Transportation .....                     | 140,262,539.14   | 144,300,151.75   | .....             | 4,037,612.61     | 2.8                 |
| Miscellaneous operations .....           | 13,632,024.46    | 14,203,419.92    | .....             | 570,395.46       | 4.0                 |
| General .....                            | 9,222,169.03     | 8,615,775.75     | 606,393.28        | .....            | 7.0                 |
| Total operating expenses .....           | \$286,809,739.61 | \$362,286,584.09 | .....             | \$75,476,844.48  | 20.8                |
| Revenues over expenses .....             | \$74,585,794.68  | \$129,591,288.06 | .....             | \$55,005,493.38  | 42.4                |
| TAXES                                    |                  |                  |                   |                  |                     |
| State and county .....                   | \$12,480,000.00  | \$11,852,758.47  | \$627,241.53      | .....            | 5.3                 |
| Federal income and excess-profits .....  | \$12,269,366.11  | \$60,600,000.00  | .....             | \$48,330,633.89  | 79.8                |
| Federal capital stock .....              | .....            | 722,557.50       | .....             | 722,557.50       | 100.0               |
| Federal unemployment insurance .....     | 4,791,085.07     | 5,344,508.50     | .....             | 553,423.43       | 10.4                |
| Federal retirement .....                 | 5,573,650.58     | 5,769,785.08     | .....             | 196,134.50       | 3.4                 |
| Other federal .....                      | 289,546.47       | 246,460.24       | \$43,086.23       | .....            | 17.5                |

## General Balance Sheet — Assets

|  | December 31,<br>1946 | December 31,<br>1945 | INCREASE<br>..... | DECREASE<br>..... |
|--|----------------------|----------------------|-------------------|-------------------|
| Investments:   |                      |                      |                   |                   |
| Road and Equipment .....   | \$1,080,102,580.09   | \$1,063,759,817.56   | \$16,342,762.53   | .....             |
| Less:  |                      |                      |                   |                   |
| Receipts from improvement and equipment fund .....   | \$23,823,091.13      | \$23,823,091.13      | .....             | .....             |
| Appropriations from income and surplus prior to July 1, 1907,<br>credited to this account .....        | 13,310,236.52        | 13,310,236.52        | .....             | .....             |
| Total .....  | \$37,133,327.65      | \$37,133,327.65      | .....             | .....             |
| Road and equipment property .....  | \$1,042,969,252.44   | \$1,026,626,489.91   | \$16,342,762.53   | .....             |
| DONATIONS AND GRANTS (Credit) .....  | \$11,795,049.39      | \$11,688,023.60      | \$107,025.79      | .....             |
| RESERVE FOR DEPRECIATION—ROAD AND EQUIPMENT (Credit) .....   | \$173,435,083.69     | \$166,091,411.72     | \$7,343,671.97    | .....             |
| RESERVE FOR AMORTIZATION OF NATIONAL DEFENSE PROJECTS (Credit) .....                                   | \$59,437,104.76      | \$59,333,693.90      | \$103,410.86      | .....             |
| SINKING FUNDS .....  | \$2,507.50           | \$50.00              | \$2,457.50        | .....             |
| CAPITAL AND OTHER RESERVE FUNDS .....  | \$539,935.64         | \$345,689.97         | \$194,245.67      | .....             |
| MISCELLANEOUS PHYSICAL PROPERTY .....  | \$26,192,714.72      | \$25,115,858.79      | \$1,076,855.93    | .....             |
| RESERVE FOR DEPRECIATION—MISCELLANEOUS PHYSICAL PROPERTY (Credit) ..                                   | \$12,922,357.52      | \$11,818,789.57      | \$1,103,567.95    | .....             |
| Investments in affiliated companies:   |                      |                      |                   |                   |
| Stocks .....   | \$18,679,195.24      | \$18,679,187.24      | \$8.00            | .....             |
| Notes .....  | 348,344.43           | 380,720.66           | .....             | \$32,376.23       |
| Advances .....   | 8,771,547.76         | 9,472,413.04         | .....             | 700,865.28        |
| Total .....  | \$27,799,087.43      | \$28,532,320.94      | .....             | \$733,233.51      |
| Investments in other companies:  |                      |                      |                   |                   |
| Stocks .....   | \$64,052,376.08      | \$64,148,974.03      | .....             | \$96,597.95       |
| Bonds and notes .....  | 22,725,409.57        | 22,859,731.36        | .....             | 134,321.79        |
| Total .....  | \$86,777,785.65      | \$87,008,705.39      | .....             | \$230,919.74      |
| RESERVE FOR ADJUSTMENT OF INVESTMENTS IN SECURITIES (Credit) .....                                     | \$33,845,942.13      | \$33,905,324.96      | .....             | \$59,382.83       |
| Total Investments .....  | \$892,845,745.89     | \$884,791,871.25     | \$8,053,874.64    | .....             |
| Current Assets:  |                      |                      |                   |                   |
| CASH .....   | \$43,001,365.39      | \$70,830,773.85      | .....             | \$27,829,408.46   |
| TEMPORARY CASH INVESTMENTS (U. S. Government securities) .....   | 162,446,022.76       | 210,000,000.00       | .....             | 47,553,977.24     |
| SPECIAL DEPOSITS .....   | 1,772,703.93         | 3,552,243.11         | .....             | 1,779,539.18      |
| LOANS AND BILLS RECEIVABLE .....   | 28,940.00            | 2,541.60             | \$26,398.40       | .....             |
| TRAFFIC AND CAR-SERVICE BALANCES—NET .....   | 9,017,861.12         | 9,017,861.12         | .....             | .....             |
| NET BALANCE RECEIVABLE FROM AGENTS AND CONDUCTORS .....  | 4,167,836.28         | 4,355,537.53         | .....             | 187,701.25        |
| MISCELLANEOUS ACCOUNTS RECEIVABLE .....  | 12,216,168.34        | 24,228,879.37        | .....             | 12,012,711.03     |
| MATERIAL AND SUPPLIES .....  | 34,845,661.75        | 34,733,652.93        | 112,008.82        | .....             |
| INTEREST AND DIVIDENDS RECEIVABLE .....  | 2,353,992.07         | 2,543,269.22         | .....             | 189,277.15        |
| ACCRUED ACCOUNTS RECEIVABLE .....  | 9,071,675.75         | 16,338,189.73        | .....             | 7,266,513.98      |
| OTHER CURRENT ASSETS:  |                      |                      |                   |                   |
| Baltimore and Ohio Railroad Co. capital stock applicable to payment of<br>extra dividend of 1914 ..... | 110,133.30           | 110,315.10           | .....             | 181.80            |
| Miscellaneous items .....  | 189,843.90           | 8,365,048.55         | .....             | 8,175,204.65      |
| Total Current Assets .....   | \$279,222,204.59     | \$375,060,450.99     | .....             | \$95,838,246.40   |
| Deferred Assets:   |                      |                      |                   |                   |
| WORKING FUND ADVANCES .....  | \$107,753.46         | \$103,923.98         | \$3,829.48        | .....             |
| OTHER DEFERRED ASSETS .....  | 33,020,922.56        | 25,792,765.44        | 7,228,157.12      | .....             |
| Total Deferred Assets .....  | \$33,128,676.02      | \$25,896,689.42      | \$7,231,986.60    | .....             |
| Unadjusted Debits:   |                      |                      |                   |                   |
| PREPAYMENTS .....  | \$3,807.81           | \$17,854.02          | .....             | \$14,046.21       |
| OTHER UNADJUSTED DEBITS .....  | 1,482,300.03         | 1,351,031.80         | \$131,268.23      | .....             |
| Total Unadjusted Debits .....  | \$1,486,107.84       | \$1,368,885.82       | \$117,222.02      | .....             |
| Grand Total .....  | \$1,206,682,734.34   | \$1,287,117,897.48   | .....             | \$80,435,163.14   |

\* Loss from sale of Baltimore & Ohio R. R. Co. common stock, charged to this account.

[Advertisement]



# Operating Results for Year 1946 Compared with Year 1945—Continued

|   | 1946            | 1945            | INCREASE | DECREASE        | Per Cent |
|---|-----------------|-----------------|----------|-----------------|----------|
| Total federal .....   | \$22,923,648.23 | \$72,683,311.32 |          | \$49,759,663.09 | 68.5     |
| Total taxes .....   | \$35,403,648.23 | \$84,536,069.79 |          | \$49,132,421.56 | 58.1     |
| Railway operating income .....                                  | \$39,182,146.45 | \$45,055,218.27 |          | \$5,873,071.82  | 13.0     |
| Equipment rents (debit) .....                                   | 10,999,214.01   | 12,609,545.29   |          | 1,610,331.28    | 12.8     |
| Joint facility rents (debit) .....                              | 1,229,580.63    | 1,338,120.33    |          | 108,539.70      | 8.1      |
| Net railway operating income .....                              | \$26,953,351.81 | \$31,107,552.65 |          | \$4,154,200.84  | 13.4     |
| Per cent—Operating expenses of operating revenues .....         | 79.36           | 73.65           | 5.71     |                 | 7.8      |
| <b>FREIGHT TRAFFIC</b><br>(Commercial Freight only)             |                 |                 |          |                 |          |
| Tons of revenue freight carried .....                           | 48,002,636      | 56,505,272      |          | 8,502,636       | 15.0     |
| Ton-miles, revenue freight .....                                | 27,474,365,447  | 35,546,845,368  |          | 8,072,479,921   | 22.7     |
| Average distance hauled per ton (miles) .....                   | 572.35          | 629.09          |          | 56.74           | 9.0      |
| Average revenue per ton-mile (cents) .....                      | .960            | 1.000           |          | .040            | 4.0      |
| Average revenue per freight-train mile .....                    | \$8.66          | \$9.65          |          | \$ .99          | 10.3     |
| <b>PASSENGER TRAFFIC</b><br>(Excludes Motor-Car Trains)         |                 |                 |          |                 |          |
| Revenue passengers carried .....                                | 4,730,542       | 7,596,011       |          | 2,865,469       | 37.7     |
| Revenue passengers carried one mile .....                       | 3,645,281,435   | 5,740,885,433   |          | 2,095,603,998   | 36.5     |
| Average distance hauled per passenger (miles) .....             | 770.58          | 755.78          | 14.80    |                 | 2.0      |
| Average passengers per passenger-train mile .....               | 191.84          | 282.92          |          | 91.08           | 32.2     |
| Average revenue per passenger-mile (cents) .....                | 1.772           | 1.674           | .098     |                 | 5.9      |
| Average revenue per passenger-train mile, passengers only ..... | \$3.40          | \$4.74          |          | \$1.34          | 28.3     |
| Average total revenue per passenger-train mile .....            | \$4.30          | \$5.62          |          | \$1.32          | 23.5     |
| * Includes depreciation, amortization and retirement charges:   |                 |                 |          |                 |          |
| Maintenance of way and structures .....                         | \$4,795,776.02  | \$13,373,932.00 |          | \$8,578,155.98  |          |
| Maintenance of equipment .....                                  | 9,431,380.55    | 42,752,830.18   |          | 33,321,449.63   |          |

## General Balance Sheet—Liabilities

|  | December 31, 1946       | December 31, 1945       | INCREASE               | DECREASE               |
|--|-------------------------|-------------------------|------------------------|------------------------|
| <b>Capital Stock</b>   |                         |                         |                        |                        |
| Common stock .....   | \$222,302,500.00        | \$222,302,500.00        |                        |                        |
| Preferred stock .....  | 99,591,520.79           | 99,591,580.79           |                        |                        |
| Total Capital Stock .....  | \$321,894,080.79        | \$321,894,080.79        |                        |                        |
| <b>Funded Debt</b> .....   | 319,891,869.22          | 366,315,157.18          |                        | \$46,423,287.60        |
| Total .....  | \$641,785,950.37        | \$688,209,237.97        |                        | \$46,423,287.60        |
| <b>Due to Affiliated Companies</b> .....   | \$9,470,009.92          | \$5,413,753.73          | \$4,056,256.19         |                        |
| <b>Current Liabilities:</b>  |                         |                         |                        |                        |
| TRAFFIC AND CAR-SERVICE BALANCES—NET .....   |                         | \$1,421,68.06           |                        | \$1,438,168.06         |
| AUDITED ACCOUNTS AND WAGES PAYABLE .....   | \$23,814,245.01         | 29,804,000.00           |                        | 5,989,813.67           |
| MISCELLANEOUS ACCOUNTS PAYABLE .....   | 3,684,945.13            | 4,000,200.00            |                        | 404,329.97             |
| INTEREST MATURED UNPAID:   |                         |                         |                        |                        |
| Coupons matured, but not presented .....   | 1,931,289.84            | 1,815,110.21            | \$116,179.63           |                        |
| Coupons and interest on registered bonds, due first proximo .....  | 2,191,285.00            | 2,857,367.50            |                        | 666,082.50             |
| DIVIDENDS MATURED UNPAID:  |                         |                         |                        |                        |
| Dividends due but uncalled for .....   | 336,697.25              | 314,149.64              | 547.61                 |                        |
| Extra dividend on common stock declared January 8, 1914, payable to stockholders of record March 2, 1914, unpaid ..... | 118,876.61              | 119,058.41              |                        | 181.80                 |
| Dividend on common stock payable second proximo .....  | 3,334,365.00            | 3,334,365.00            |                        |                        |
| UNMATURED INTEREST ACCRUED .....   | 1,692,014.03            | 1,501,713.33            | 190,300.70             |                        |
| ACCRUED ACCOUNTS PAYABLE .....   | 7,289,449.10            | 9,133,473.09            |                        | 1,844,023.99           |
| TAXES ACCRUED .....  | 32,170,473.67           | 78,122,648.44           |                        | 45,952,174.77          |
| OTHER CURRENT LIABILITIES .....  | 3,356,353.57            | 3,897,968.11            |                        | 541,614.54             |
| Total Current Liabilities .....  | \$79,919,994.21         | \$136,427,355.57        |                        | \$56,507,361.36        |
| <b>Deferred Liabilities</b> .....  | \$7,676,282.09          | \$8,135,336.94          |                        | \$459,054.85           |
| <b>Unadjusted Credits:</b>   |                         |                         |                        |                        |
| PREMIUM ON FUNDED DEBT .....   | \$5,250,429.32          | \$3,721,400.31          | \$1,529,029.01         |                        |
| RESERVE FOR FIRE INSURANCE .....   | 14,964,846.60           | 13,925,408.33           | 1,039,438.27           |                        |
| RESERVE FOR DEPRECIATION—LEASED PROPERTY .....   | 5,236.42                | 3,480.20                | 1,756.22               |                        |
| OTHER UNADJUSTED CREDITS:  |                         |                         |                        |                        |
| Contingent interest .....  | 120,023.34              | 17,819.99               | 102,203.35             |                        |
| Miscellaneous items .....  | 33,673,293.32           | 26,189,342.00           | 7,483,951.32           |                        |
| Total Unadjusted Credits .....   | \$54,013,829.00         | \$43,857,450.83         | \$10,156,378.17        |                        |
| <b>Total Liabilities</b> .....   | <b>\$792,866,065.59</b> | <b>\$882,043,135.04</b> |                        | <b>\$89,177,069.45</b> |
| <b>Surplus:</b>  |                         |                         |                        |                        |
| PAID-IN SURPLUS .....  | \$860.00                | \$860.00                |                        |                        |
| <b>EARNED SURPLUS—APPROPRIATED:</b>  |                         |                         |                        |                        |
| Additions and betterments .....  | \$28,522,352.23         | \$28,522,352.23         |                        |                        |
| Funded debt retired through income and surplus .....   | 3,118,978.66            | 2,586,478.66            | \$532,500.00           |                        |
| Sinking fund reserves .....  | 2,507.50                | 50.00                   | 2,457.50               |                        |
| Reserve against possible refunds on U. S. Government shipments .....   | 3,742,146.21            | 7,522,281.16            |                        | \$3,780,134.95         |
| Total Earned Surplus—Appropriated .....  | \$35,385,984.60         | \$38,631,162.05         |                        | \$3,245,177.45         |
| <b>Earned Surplus—Unappropriated</b> .....   | <b>\$338,845,276.91</b> | <b>\$326,872,570.65</b> | <b>\$11,972,706.26</b> |                        |
| Total Earned Surplus .....   | \$374,231,261.51        | \$365,503,732.70        | \$8,727,528.81         |                        |
| Total Surplus .....  | \$374,232,121.51        | \$365,504,592.70        | \$8,727,528.81         |                        |

As this consolidated balance sheet excludes all intercompany items, securities of the Los Angeles & Salt Lake Railroad Company and The St. Joseph and Grand Island Railway Company owned by other System companies are not included. The difference between the par and face value of such securities as carried on the books of the issuing companies (less unextinguished discount on the bonds and discount charged to Earned Surplus—Unappropriated but added back in consolidating the accounts) and the amounts at which the securities are carried on the books of the owning companies is set up here to balance

|                          |                           |                           |             |                        |
|--------------------------|---------------------------|---------------------------|-------------|------------------------|
|                          | \$39,584,547.24           | \$39,570,169.74           | \$14,377.50 |                        |
| <b>Grand Total</b> ..... | <b>\$1,206,682,734.34</b> | <b>\$1,287,117,897.48</b> |             | <b>\$80,435,163.14</b> |

(Continued from page 914)

the installation of centralized traffic control on 97-mi. of single track between Clare, Ohio, and Vera, on the line between Cincinnati and Portsmouth. The order includes a 15-ft. Style C control machine, with the required coded and carrier equipment, housings, Style A-21 electro-pneumatic dual-control switch movements, position-light signals, T-21 switch layouts with SL-20 electric switch locks, relays, rectifiers and transformers. The installation work will be done by the construction forces of the railway.

## Supply Trade

### Galvin Profit Equal to 82c A Capital Share

Net sales of the Galvin Manufacturing Corporation for the fiscal year ended on November 30, 1946, amounted to \$23,201,107, while the net profit totaled \$656,286, equal to 82 cents a share on 800,000 capital shares, according to the recently released annual report. During the first eight weeks of the current fiscal year, the report said, net profit after taxes was \$312,988, compared with a net loss of \$422,772 during the same period of 1947.

### Alleghany Ludlum Sales Topped \$95 Million Last Year

Sales of the Alleghany Ludlum Steel Corporation in 1946 totaled \$95,062,581, compared with \$100,336,822 in the preceding year, according to the annual report. Net income was \$6,599,346, compared with \$3,379,369. Unfilled orders on the books at the end of the year amounted to about \$34,000,000, the report said, sufficient to keep the company's mills running at near capacity for approximately four months. The present rate of entry of new orders, the report added, assures capacity operations in 1947, if other conditions permit.

**William S. Boyce**, manager of railroad sales of **Colorado Fuel & Iron Corp.**, at Denver, Colo., has been promoted to general manager of railroad sales there. A photo of Mr. Boyce and a sketch of his career appeared in the *Railway Age* of March 1, in connection with his appointment as manager of railroad sales.

The **Towmotor Corporation** has announced the opening of a factory sales and service branch, located at 1171 Cooper street, Camden, N. J., where **Ray M. Scott, Jr.** will have charge of sales activities. **William Wilhelm**, service manager, will be in charge of complete repairs and parts facilities.

The **American Car & Foundry Co.** has announced the appointment of **Justus W. Lehr** as district manager in charge of its Berwick, Pa., plant, to succeed **Guy C. Beishline**, resigned. Earlier in his career, Mr. Lehr was associated with the Pullman Company, the Mt. Vernon Car Company, the Curtis Bay Copper Iron

Works of Baltimore, Md., and the Sanford Day Iron Works, Knoxville, Tenn. He joined American Car & Foundry in 1940 and served as assistant district manager of the Berwick plant until his transfer as head of the Chicago plant, in December, 1944.

**E. J. Schiffer**, a member of the traffic department of the **Gulf Oil Corporation** for 32 years, has been appointed general traffic manager for the firm, with headquarters in Pittsburgh, Pa., to succeed the late **J. C. Beck**.

The **Bird-Archer Company** has announced the appointment of the **John H. Carter Company**, New Orleans, La., as its representative in Louisiana, southern Arkansas, eastern Texas and southern Mississippi.

**J. D. Brandon**, formerly vice-president in charge of sales for the **American Arch Company**, has been elected president, to succeed **B. A. Clements**, who has been elected vice-chairman of the board of directors. Mr. Brandon will transfer his headquarters from Chicago to New York.

**Robert P. Nichols**, formerly sales supervisor in the Export division of **R. G. LeTourneau, Inc.**, has been appointed assistant domestic sales manager for the firm. Mr. Nichols was graduated from Purdue University with a degree in en-



Robert P. Nichols

gineering and early in his career was associated with the Caterpillar Tractor Company as a special representative in Central and South America. He served overseas as a maintenance officer in the United States Navy during World War II, after which he joined LeTourneau as a field engineer.

**John M. Otter**, whose appointment as general sales manager of the **Philco Corporation** was announced in the *Railway Age* for April 26, joined the company in 1926 and the following year was appointed district sales representative for northeastern Pennsylvania. He continued in that capacity until 1935, when he was appointed sales manager of the Philadelphia, Pa., branch of Philco Distributors, Inc. From 1937 to 1944 he served successively as manager of the Detroit, Mich., office, general man-

ager of the Chicago branch of Philco Distributors and sales manager for the Middle West. In the latter year he was



John M. Otter

appointed sales manager of the Radio division, the position he held at the time of his recent appointment.

## OBITUARY

**Nelson H. Snyder**, who had recently been appointed a sales representative at St. Louis, Mo., for the Rail Joint Company, died suddenly on April 18 at Dallas, Tex. Prior to going to St. Louis, Mr. Snyder had served with this company at Chicago for about three years.

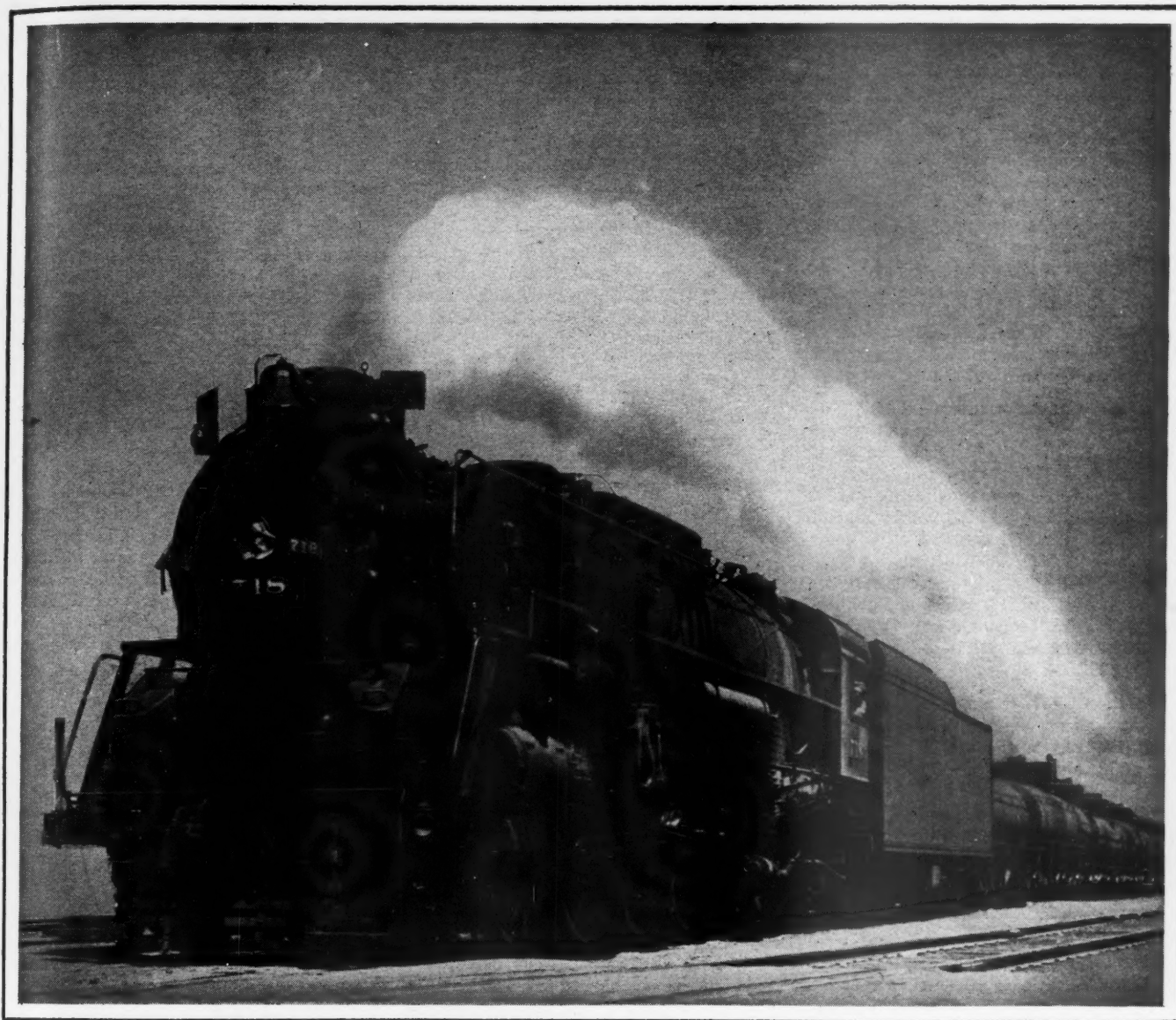
**George A. Hull**, a vice-president and director of Union Asbestos & Rubber Co., whose death on April 5 was reported in the *Railway Age* of April 12, had been associated with that firm since 1923. Mr. Hull had served with the Great Northern for five years, and was at one time as-



George A. Hull

sistant mechanical engineer of the Chicago, Rock Island & Pacific. Prior to his election as a vice-president of Union Asbestos & Rubber Co., he had been general manager of the equipment specialties division of the firm. He was transferred to the Los Angeles (Cal.) area in May, 1945, and made his home at Vista, Cal.





## to replace inadequate motive power

In wartime emergencies the railroads mobilized every locomotive that could be kept in service. But now inadequate motive power cannot cope with steadily increasing demands for service.

Efficiency and economy of operation call for the most modern types of locomotives, like this Nickel Plate Lima-built 2-8-4, capable of handling heavy freights on long runs at sustained high speeds.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

## Financial

**ANN ARBOR.**—*Annual Report.*—Operating revenues of this road last year amounted to \$5,962,140, compared with \$6,123,270 in 1945. Operating expenses totaled \$5,417,973, compared with \$4,968,754. Fixed charges were \$247,601, compared with \$250,171. The net deficit was \$117,365, compared with a net income of \$331,123. Current assets at the end of the year were \$3,099,258, compared with \$3,063,305. Current liabilities were \$1,096,533, compared with \$1,109,348. Long term debt was \$6,186,121, a decrease of \$4.00.

**ALABAMA GREAT SOUTHERN.**—*Annual Report.*—Operating revenues last year amounted to \$14,445,249, compared with \$19,616,297 in 1945. Operating expenses were \$12,371,826, compared with \$13,243,285. Fixed charges were \$371,590, compared with \$391,031. Net income was \$1,563,290, compared with \$2,206,769. Current assets at the end of the year were \$9,274,875, compared with \$12,290,215. Current liabilities were \$2,572,015, compared with \$5,983,381. Long term debt was \$11,547,883, compared with \$11,095,000.

**BAMBERGER.**—*Acquisition.*—Division 4 of the Interstate Commerce Commission has authorized this road to acquire, through ownership of stock, control of the Salt Lake Rail & Bus Terminal Company, which, in turn, was authorized to purchase the properties and assets of the reorganized Salt Lake Terminal Company. At the same time, the commission authorized J. M. Bamberger to acquire control, through ownership of stock, of the Bamberger and S. L. R. & B. T. The transactions were approved subject to the usual employee-protection conditions. In pursuance of the reorganization plan of the Salt Lake Terminal, the commission also has authorized the S. L. R. & B. T. to issue 5,250 shares of common stock without par value. The stock will be exchanged on the basis of one share of stock for each \$100 principal amount of first mortgage 6 per cent bonds of the S. L. T.

**BELT OF CHICAGO.**—*Annual Report.*—Operating revenues in 1946 totaled \$7,895,544, compared with \$7,415,248 in the preceding year. Operating expenses amounted to \$5,889,310, compared with \$5,007,126. Fixed charges were \$1,616,266, compared with \$1,608,360. The net deficit was \$901, compared with a net income of \$184,311. Current assets at the end of the year were \$2,642,609, compared with \$2,186,105. Current liabilities were \$1,469,116, compared with \$1,113,341.

**CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.**—*Annual Report.*—Operating revenues of this road last year were \$27,318,375, compared with \$28,150,035 in 1945. Operating expenses were \$23,917,042, compared with \$21,733,912. Fixed charges were \$2,397,845, compared with \$2,380,998. The net deficit was \$1,363,100, compared with net income of \$889,986. Current assets at the end of the year were \$9,915,687, compared with \$9,539,983. Current liabilities were \$5,261,306, compared with \$5,649,784.

Long term debt was \$51,488,409, compared with \$51,030,291.

**CHICAGO & EASTERN ILLINOIS.**—*Annual Report.*—Operating revenues of this road last year amounted to \$24,641,101, compared with \$29,666,438 in 1945. Operating expenses were \$23,639,915, compared with \$23,444,395. Fixed charges were \$624,195, compared with \$624,060. The net deficit was \$517,901, compared with a net income of \$1,052,451. Current assets at the end of the year were \$9,936,136, compared with \$13,241,269. Current liabilities were \$4,922,453, compared with \$6,893,436. Long term debt totaled \$25,971,837, compared with \$25,780,552.

**CHICAGO & NORTH WESTERN.**—*Annual Report.*—Operating revenues of this road last year amounted to \$160,516,750, compared with \$170,665,890 in 1945. Operating expenses were \$136,562,753, compared with \$138,612,136. Fixed charges were \$2,291,234, compared with \$2,786,839. Net income was \$7,179,832, compared with \$14,116,780. Current assets at the end of the year totaled \$58,007,908, compared with \$68,896,409. Current liabilities were \$31,184,134, compared with \$40,220,376. Long term debt was \$176,026,910, compared with \$169,700,997.

**CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.**—*Annual Report.*—Operating revenues of this road in 1945 totaled \$201,180,111, compared with \$228,946,936 in the preceding year. Operating expenses were \$171,823,263, a decrease of \$15,036,154. Net income was \$3,176,068, a decrease of \$10,901,843.

**CHESAPEAKE & OHIO.**—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$1,650,000 of 1½ per cent equipment trust certificates, the proceeds of which will be applied toward the purchase of nine 2-8-4 type freight locomotives, as noted in *Railway Age* of April 5, page 721. The certificates will mature in 10 equal annual installments, starting May 1, 1948. The report also approves a selling price of 99.219, the bid of Halsey, Stuart & Co., on which basis the average annual cost will be approximately 1.65 per cent.

**CENTRAL OF GEORGIA.**—*Annual Report.*—Operating revenues in 1946 totaled \$31,703,423, compared with \$38,253,680 in the preceding year. Operating expenses amounted to \$29,395,993, compared with \$37,087,032. The net deficit was \$3,563,625, compared with a net deficit of \$777,544. Current assets at the end of the year were \$28,648,494, compared with \$34,246,713. Current liabilities were \$4,473,849, compared with \$7,232,117. Long term debt was \$59,330,731, compared with \$60,992,167.

**CINCINNATI, NEW ORLEANS & TEXAS PACIFIC.**—*Annual Report.*—Operating revenues in 1946 totaled \$29,879,580, compared with \$33,251,383 in the preceding year. Operating expenses were \$22,701,491, compared with \$24,242,919. Fixed charges were \$1,727,538, compared with \$1,813,534. Net income was \$2,256,644, compared with \$2,320,929. Current assets at the end of the year were \$18,005,561, compared with \$18,294,178. Current liabilities were \$7,160,159, compared with \$9,021,014.

**DETROIT & MACKINAC.**—*Annual Report.*—Operating revenues of this road last year amounted to \$1,415,972, an increase of \$376,317, over 1945. Operating expenses were \$1,035,070, an increase of \$179,675. Net income was \$97,966, an increase of \$100,338.

**DULUTH, MISSABE & IRON RANGE.**—*Annual Report.*—Operating revenues of this road last year amounted to \$33,499,727, compared with \$39,216,250 in 1945. Operating expenses were \$18,976,379, compared with \$21,599,381. Fixed charges were \$724,557, compared with \$818,591. Net income was \$8,358,602, compared with \$14,397,338. Current assets at the end of the year were \$21,216,225, compared with \$23,604,191. Current liabilities were \$10,781,384, compared with \$9,094,678. Funded debt totaled \$21,478,000, compared with \$23,514,000.

**ELGIN, JOLIET & EASTERN.**—*Annual Report.*—Operating revenues of this road last year totaled \$26,836,974, compared with \$31,364,479 in the preceding year. Operating expenses were \$21,060,208, compared with \$26,372,299. Fixed charges were \$697,405, compared with \$693,426. Net income was \$1,475,231, compared with \$657,632. Current assets at the end of the year were \$58,103,597, compared with \$17,993,391. Current liabilities were \$10,510,267, compared with \$8,566,321. Funded debt totaled \$22,492,000, compared with \$21,298,000.

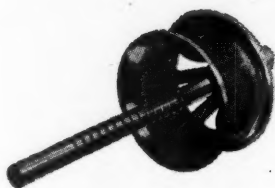
**GEORGIA, SOUTHERN & FLORIDA.**—*Annual Report.*—Operating revenues of this road last year totaled \$5,508,891, compared with \$6,626,340 in 1945. Operating expenses were \$4,572,592, compared with \$4,191,342. Fixed charges were \$321,404, compared with \$372,271. Net income was \$238,117, compared with \$445,086. Current assets at the end of the year were \$2,115,658, compared with \$3,153,324. Current liabilities were \$1,143,259, compared with \$2,422,283. Long term debt was \$5,664,719, compared with \$5,561,278.

**GULF MOBILE & OHIO.**—*Alton Reorganization.*—This road has filed with the Interstate Commerce Commission a supplemental application in which it seeks (1) authority to assume obligation and liability to pay coupons matured on or prior to October 1, 1940, appurtenant to the 3 per cent refunding mortgage bonds of the Chicago & Alton; (2) authority, in consummating the plan of reorganization of the Alton, to issue demand notes as evidence of a \$30,233,350 bank loan; and (3) authority to sell the notes without competitive bidding.

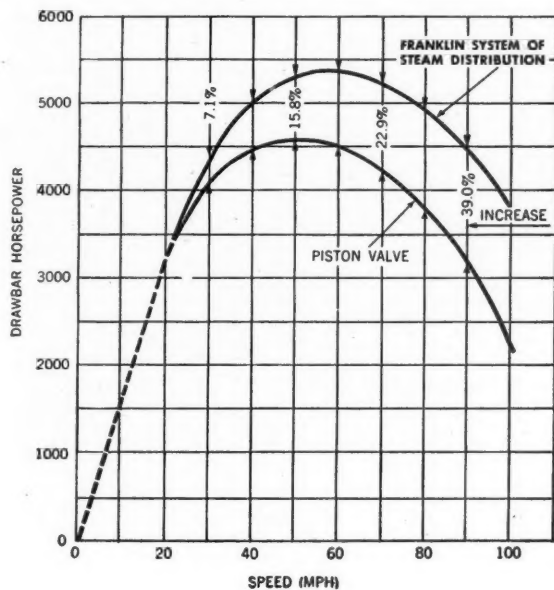
**KANSAS CITY SOUTHERN.**—*Annual Report.*—Operating revenues of this road in 1946 totaled \$30,043,046, compared with \$35,872,419 in the preceding year. Operating expenses amounted to \$19,478,307, compared with \$23,038,459. Fixed charges were \$2,238,532, compared with \$2,251,873. Net income was \$3,680,194, compared with \$5,616,863. Current assets at the end of the year were \$25,650,948, compared with \$34,729,314. Current liabilities were \$23,134,193, compared with \$30,619,426. Long term debt was \$49,647,074, compared with \$50,803,320.



# This is what the Franklin System of Steam Distribution will do for a Modern Locomotive



These curves show the improvement in performance that may be expected from a modern locomotive when it is equipped with the Franklin System of Steam Distribution. Computations are based on a 4-8-4 locomotive of recent design. Boiler pressure is 300 psi, steam temperature is 730° F, cylinders are 25 x 32 inches, driving wheels are 80 inches in diameter, total heating surface is 4225 sq. ft. and grate area is 100.2 sq. ft.

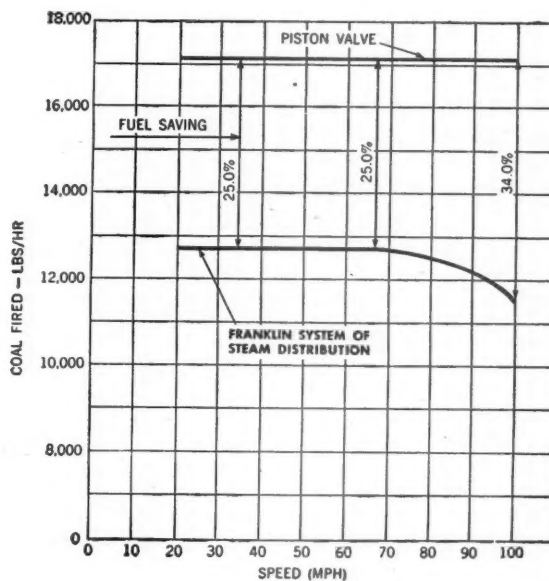


## SAVING IN FUEL

This curve shows coal required to develop the horsepower shown for the piston-valve locomotive in the curve above.

## INCREASED HORSEPOWER

This curve shows a comparison of horsepower at rear of tender for a modern locomotive when equipped with piston valves and when equipped with the Franklin System of Steam Distribution. In both cases, steam consumption by the engine is 90,000 lbs per hour.



## FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS  
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

**ILLINOIS CENTRAL.—Annual Report.**—Operating revenues last year amounted to \$211,117,845, compared with \$240,053,549 in the preceding year. (All 1945 figures have been revised, for purposes of comparison, to include the Gulf & Ship Island.) Operating expenses were \$168,229,162, compared with \$173,866,367. Fixed charges were \$11,395,329, compared with \$12,222,269. Net income was \$7,462,574, compared with \$11,697,481. Current assets at the end of the year were \$101,252,765, compared with \$113,574,692. Current liabilities were \$59,585,991, compared with \$63,030,921. Funded debt was \$241,874,170, compared with \$256,817,965.

During the year, the report said, 283 new industries, not including new coal mines, were located on the road's lines. It is estimated the Illinois Central will receive approximately \$7,000,000 in revenue annually from these new industries.

**LOUISIANA & ARKANSAS.—Annual Report.**—Operating revenues of this road last year amounted to \$13,455,624, compared with \$181,929,944, in 1945. Operating expenses were \$8,816,278, compared with \$12,016,229. Fixed charges were \$625,760, compared with \$996,862. Net income was \$1,635,721, compared with \$1,693,030. Current assets at the end of the year were \$9,586,464, compared with \$12,065,763. Current liabilities were \$3,722,849, compared with \$5,626,011. Long term debt was \$15,277,500, compared with \$17,482,940.

**LEHIGH & HUDSON RIVER.—Annual Report.**—Operating revenues of this road last year amounted to \$2,787,226, compared with \$2,951,598 in 1945. Operating expenses totaled \$2,048,973, compared with \$2,545,896. Net income was \$260,404, compared with \$175,217.

**NASHVILLE, CHATTANOOGA & ST. LOUIS.—Annual Report.**—Operating revenues of this road in 1946 amounted to \$29,132,791, compared with \$37,629,499 in the preceding year. Operating expenses totaled \$28,228,923, compared with \$35,249,022. Net income was \$270,427, compared with \$1,838,970. Current assets at the end of the year were \$15,163,545, compared with \$18,757,277, current liabilities were \$5,387,705, compared with \$5,199,743. Long term debt was \$17,088,400, compared with \$17,480,500.

**NEW ORLEANS & NORTHEASTERN.—Annual Report.**—Operating revenues of this road last year totaled \$8,817,442, compared with \$11,658,120 in 1945. Operating expenses were \$6,039,415, compared with \$6,805,793. Fixed charges were \$324,468, compared with \$326,758. Net income was \$721,035, compared with \$797,644. Current assets at the end of the year were \$7,312,069, compared with \$10,197,785. Current liabilities were \$2,805,485, compared with \$4,934,878. Long term debt was unchanged at \$7,195,000.

**NEW YORK, CHICAGO & ST. LOUIS.—Annual Report.**—Operating revenues of this road last year totaled \$74,332,966, compared with \$85,567,129 in 1945. Operating expenses were \$58,506,092, compared with \$72,082,613. Fixed charges were \$3,979,180, compared with \$5,370,828. Net income was \$5,567,790, compared with \$8,083,229. Cur-

rent assets at the end of the year were \$32,283,627, compared with \$35,703,997. Current liabilities were \$15,300,057, compared with \$15,532,957. Long term debt was \$113,029,425, compared with \$115,360,221.

During the year 72 permanent industries and businesses were established along Nickel Plate lines, compared with 44 new industries located during 1945, the report said. It is estimated these industries will give the road about \$750,000 gross revenues annually.

**NEW YORK, ONTARIO & WESTERN.—Trustees' Certificates.**—Division 4 of the Interstate Commerce Commission has denied an application by this road for authority to sell at par to the Reconstruction Finance Corporation \$450,000 of 4 per cent trustees' certificates. Proceeds of the sale of the certificates were to be applied toward the settlement of claims of employees of the road for retroactive wage adjustments. "From the . . . analysis of the earning power of the property operated by the applicants, we are unable to find that they could pay the principal of and interest on the proposed trustee certificates out of earnings," the commission said. "In our view the accumulation of obligations which would be expected to participate with the certificates in the proceeds of any liquidation of the property precludes a finding that any lien upon such property would constitute adequate security. We cannot find that the Finance Corporation would be adequately secured."

**PERE MARQUETTE.—Annual Report.**—Operating revenues of this road last year amounted to \$50,686,344, compared with \$51,500,686 in 1945. Operating expenses were \$43,512,251, compared with \$45,558,793. Fixed charges were \$1,995,633, compared with \$2,534,243. Net income was \$645,285, compared with \$2,139,120. Current assets at the end of the year were \$24,545,390, compared with \$22,078,934. Current liabilities were \$13,878,378, compared with \$11,157,663. Long term debt was \$57,514,280 compared with \$55,806,736.

**PITTSBURGH & WEST VIRGINIA.—Annual Report.**—Operating revenues of this road last year totaled \$4,769,490, a decrease of \$1,826,749 under 1945. Operating expenses were \$4,369,358, a decrease of \$531,954. The net loss was \$45,523, a decrease of \$630,135. Current assets at the end of the year were \$1,847,401, a decrease of \$368,105. Current liabilities were \$905,972, a decrease of \$1,241,969. Long term debt was \$10,809,000, an increase of \$555,000.

**RICHMOND, FREDERICKSBURG & POTOMAC.—Annual Report.**—Operating revenues of this road last year totaled \$26,021,789, a decrease of \$7,324,007 under 1945. Operating expenses amounted to \$18,203,719, a decrease of \$3,410,665. Net income was \$3,376,922, an increase of \$1,030,496. Current assets at the end of the year were \$10,150,204, a decrease of \$4,351,018. Current liabilities were \$6,514,122, a decrease of \$3,179,716. Long term debt was \$148,000, a decrease of \$74,000.

**ST. LOUIS & TROY.—Promissory Note.**—Division 4 of the Interstate Commerce

Commission has authorized this road to issue at par a 5 per cent secured promissory installment note for \$10,000 to evidence a loan from M. C. Foster of Troy, Mo. Proceeds of the loan will be applied toward the purchase of a 20-ton gasoline locomotive at a cost of \$12,165.

**ST. LOUIS SOUTHWESTERN.—Annual Report.**—Operating revenues of this road last year totaled \$46,646,702, compared with \$65,013,442 in 1945. Operating expenses amounted to \$32,640,969, compared with \$37,283,254. Fixed charges were \$3,015,037, compared with \$3,008,634. Net income was \$4,665,668, compared with \$3,993,006. Current assets at the end of the year were \$30,924,243, a decrease of \$11,352,390. Current liabilities were \$7,665,847, a decrease of \$13,116,148. Long term debt was \$74,790,364, a decrease of \$744,897.

**TEXAS & PACIFIC.—Annual Report.**—Operating revenues of this road last year totaled \$55,901,067, compared with \$75,518,581 in 1945. Operating expenses were \$42,441,477, compared with \$44,085,849. Fixed charges amounted to \$2,811,806, compared with \$3,578,128. Net income was \$5,435,135, compared with \$7,361,808. Current assets at the end of the year were \$28,114,179, compared with \$42,365,845. Current liabilities were \$10,827,765, compared with \$25,187,008. Long term debt was \$64,084,114, compared with \$65,317,347. Since January 1, 1943, the report pointed out, the Texas & Pacific has reduced its publicly-held funded debt by \$13,459,000, or 17.4 per cent, and annual interest charges have been cut by \$1,070,754, or 28.2 per cent.

**VIRGINIAN.—Annual Report.**—Operating revenues last year totaled \$24,788,095, compared with \$28,308,057 in 1945. Operating expenses amounted to \$17,820,571, compared with \$23,349,028. Fixed charges were \$1,816,539, compared with \$1,955,345. Net income was \$3,174,955, compared with \$4,247,493. Current assets at the end of the year were \$13,614,015, compared with \$15,501,822. Current liabilities were \$7,249,291, compared with \$7,012,272. Long term debt was \$60,330,784, compared with \$59,850,000.

**WHEELING & LAKE ERIE.—Annual Report.**—Operating revenues in 1946 amounted to \$21,303,141, compared with \$24,658,039 in the preceding year. Operating expenses were \$15,878,658, compared with \$19,571,266. Fixed charges were \$610,771, compared with \$559,676. Net income was \$3,790,148, compared with \$2,749,915. Current assets at the end of the year were \$13,449,599, compared with \$13,832,774. Current liabilities were \$6,167,881, compared with \$6,891,206. Long term debt was \$18,188,000, compared with \$17,334,000.

## Dividends Declared

International of Central America.—5% preferred (cum.), \$1.25, payable May 15 to holders of record May 6.

Norfolk & Western.—\$2.50, quarterly, payable June 10 to holders of record May 14.

Ontario & Quebec.—\$3.00, semi-annually, payable June 2 to holders of record May 1.

Pittsburgh, Bessemer & Lake Erie.—6% preferred, \$1.50, semi-annually, payable June 2 to holders of record May 15.

Reading.—4% non cum 1st preferred, 50¢, quarterly, payable June 12 to holders of record May 22.

Southern.—75¢, quarterly, payable June 16 to holders of record May 15.



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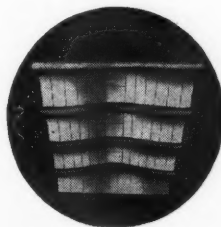


**IF A LOCOMOTIVE SEEMS LAZY**

When a locomotive requires undue forcing to do its regular job, it may be because it is not getting all the power it should from the coal consumed.

The maintenance, at all times, of a complete brick arch in the firebox is always an essential in securing proper engine performance. And the heavier the train and the higher the speed, the greater are the gains from keeping the arch complete.

**HARBISON-WALKER  
REFRACTORIES CO.**  
*Refractories Specialists*



**AMERICAN ARCH CO. INC.**  
60 East 42nd Street, New York 17, N. Y.  
*Locomotive Combustion Specialists*

May 3, 1947

## Average Prices Stocks and Bonds

|  | Apr. 29 | Last week | Last year |
|--|---------|-----------|-----------|
| Average price of 20 representative railway stocks... | 44.86   | 45.63     | 63.48     |
| Average price of 20 representative railway bonds...  | 89.14   | 89.44     | 100.91    |

## Construction

### C. & O. Spending \$115 Million on Improvements

The board of directors of the Chesapeake & Ohio Lines has authorized expenditures totaling \$114,918,369 for improvements to road and equipment and for the purchase of new rolling stock, it has been announced. Included in the expenditures are \$8,340,000 for branch lines, \$5,369,627 for wharves and docks, \$5,352,637 for signals and interlocking, \$4,594,640 for bridges, trestles and culverts, \$4,549,835 for line and grade revisions, \$3,346,822 for shop and terminal facilities, \$2,898,975 for stations and office buildings, \$2,717,001 for industrial and mine tracks, \$2,340,730 for yard tracks and sidings, \$796,543 for miscellaneous equipment and road machines, \$562,443 for coaling stations, \$494,575 for water stations, and \$309,795 for communications.

Contracts have been awarded recently for the following projects, the estimated costs of which are shown in parentheses: To the Codell Construction Company, Winchester, Ky., for the grading, masonry and drainage work connected with the construction of a 23.5 mi. branch line at Wayland, Ky. (\$2,388,300), and for similar work in connection with the construction of mine tracks for a coal development at Meade Fork, Va. (\$234,400); to the Sutton Company, Radford, Va., for rearranging and enlarging barney and return yards and replacing the 20th street bridge with an underpass, all at Newport News, Va. (\$412,200); to the Pittsburgh Des Moines Steel Company, Pittsburgh, Pa., for replacing an elevated steel water tank with a steel tank of the standpipe type at Stevens, Ky. (\$25,000); to J. C. O'Connor & Sons, Fort Wayne, Ind., for rebuilding bridges at Economy (\$28,200), Peru (\$39,300), Fowler (\$52,000) and Webster (\$31,500), all in Indiana; and at Newkirk (\$30,456) and Fernald (\$38,900), both in Ohio.

The following projects, all of which will be undertaken by the road's own forces, have been authorized and their probable costs are shown in parentheses: Rebuilding a bridge at JD cabin, Va. (\$54,200); rebuilding bridges at Whitcomb (\$82,000), Irene (\$43,600) and MacCorkle (\$44,000), all in West Virginia, installing additional floodlights in the Hinton, W. Va. yards (\$26,300); laying additional tracks at the icing plant (\$34,150) and replacing number eight turnouts with number ten turnouts (\$53,600), both at Russell, Ky.; rebuilding a bridge at Riverton (\$40,100) and rebuilding and extending a bridge at Augusta (\$122,400), both in Kentucky; rebuilding bridges at Stockdale (\$45,800) and at Addison (\$80,600), both in Ohio; repairing and strengthening a bridge at GB cabin, Ohio (\$27,000); raising and strengthening a bridge at Greggs, Ohio (\$86,000); re-

placing and extending the spans of two bridges at Addison (\$61,725).

Bids have been, or will be, requested for the following additional authorized projects, the probable costs of which are shown in parentheses: Constructing 18 additional storage tracks at Newport News (\$128,600); constructing a 125-ton concrete coaling station to replace a frame structure at Staunton (\$36,900), and constructing a 75-ton concrete coaling station to replace a frame structure at Lynchburg (\$37,800), both in Virginia; for modernizing a passenger station (\$60,500) and for constructing additional main line and yard tracks (\$880,800) at Huntington, constructing a 300-ton concrete coaling station to replace a frame structure at Danville (\$99,500) and rebuilding a bridge (\$58,000) at Amherstdale, all in West Virginia; constructing additional track facilities in the River yard at Ashland, Ky. (\$151,825); renewing the concrete suction pipe tunnel at a pump plant (\$47,000) and rearranging car repair yard tracks, constructing a shop building and concrete truckways (\$244,700), and constructing a Y.M.C.A. building (\$583,700) at Russell, Ky.; raising a bridge at GB cabin (\$25,800), rebuilding the abutments of a bridge at Robbins (\$47,400) and constructing a water station at Powell wye (\$113,800), all in Ohio.

**INTERNATIONAL-GREAT NORTHERN.**—This road is installing 144 mi. of automatic block signals between Palestine, Tex., and Taylor.

**CHESAPEAKE & OHIO.**—The Interstate Commerce Commission has authorized the Norfolk & Western to intervene in the proceeding in which the C. & O. seeks commission authority to construct a 5.3-mile extension in Mingo county, W. Va., as reported in *Railway Age* of April 5, page 723.

## Organizations

Rowland E. Dobbins, traffic manager of Northrup, King & Co., has been elected president of the Twin City chapter of the **Army Transportation Association** at its annual meeting. C. E. Finley, vice president-traffic of the Great Northern, was elected first vice-president; C. Edward Belanger, assistant sales manager, J. R. Clark Co., second vice-president; G. Allan MacNamara, general traffic manager, Soo Line, third vice-president; and George J. Turgeon, general agent, Santa Fe, secretary-treasurer.

Directors of the Twin City chapter, all re-elected, are L. C. Sprague, president, Minneapolis & St. Louis; C. E. Denney, president, Northern Pacific; and C. P. Varney, retiring president, executive representative of the Chicago, Rock Island & Pacific.

The guest speaker at the May 9 meeting in New York of **Railroadians of America** will be E. P. Gangewere, superintendent motive power and rolling equipment of the Reading. His topic is "Keeping Them Rolling on the Reading." The meeting will be

held in the Pennsylvania station Y. M. C. A. Auditorium.

The **Northwest Shippers Advisory Board**, at its 80th regular meeting on April 24, at Sioux Falls, S. D., urged that a plan be established to provide a full freight car supply to move the 1947 grain crop. H. J. Gramlich, agricultural agent of the Chicago & North Western, delivered the luncheon address on the subject, "Agriculture and Industry Are Inseparable."

The third annual meeting of the **National Conference on Industrial Hydraulics** (formerly the Hydraulic Machinery Conference) will be held on October 16 and 17, at the Hotel Continental in Chicago. This conference is sponsored by Armour Research Foundation and the Graduate School of Illinois Institute of Technology. The subjects of the four half-day sessions will be "Cavitation"; "Industrial Application of Hydraulics"; "Automotive Fluid Transmissions"; and "Hydraulic Controls."

A meeting of the **Indianapolis Car Inspection Association** will be held in the Indianapolis Union Station at 7 p. m., May 5. The program scheduled is a discussion of the lading on open top equipment.

The **Traffic Club of New York** will hold its first golf outing on May 6, at the Wykagyl Country Club, New Rochelle, N. Y. C. A. Miller is in charge of the Sports Committee.

The **Eastern Car Foremen's Association** will meet May 9 at the Engineering Societies building, New York City, at 8 p. m. Frank C. Goble, general air brake supervisor of the New York, New Haven & Hartford, will speak on "Freight and Passenger Car Train Handling."

The **Central Railway Club of Buffalo** will hold a Ladies Night Spring Dance on May 21 at the Hotel Niagara, Niagara Falls, N. Y.

A meeting of the **Western Railway Club** will be held at the Hotel Sherman, Chicago, on May 22, at 6 p. m. No special program has been announced.

## Abandonments

**UNION PACIFIC.**—Division 4 of the Interstate Commerce Commission has dismissed without prejudice this road's application for authority to abandon that portion of its Greeley branch from Barnesville, Colo., to Briggsdale, 13.4 miles.

## Overseas

**GREAT BRITAIN.**—A program for the development of its system has been drawn up by the London & North Eastern to cover a five-year period and to cost upwards of \$200,000,000. Extensive track renewals and improvements provided for in the plan



# A Record Breaker

*... equipped with a Superheater*

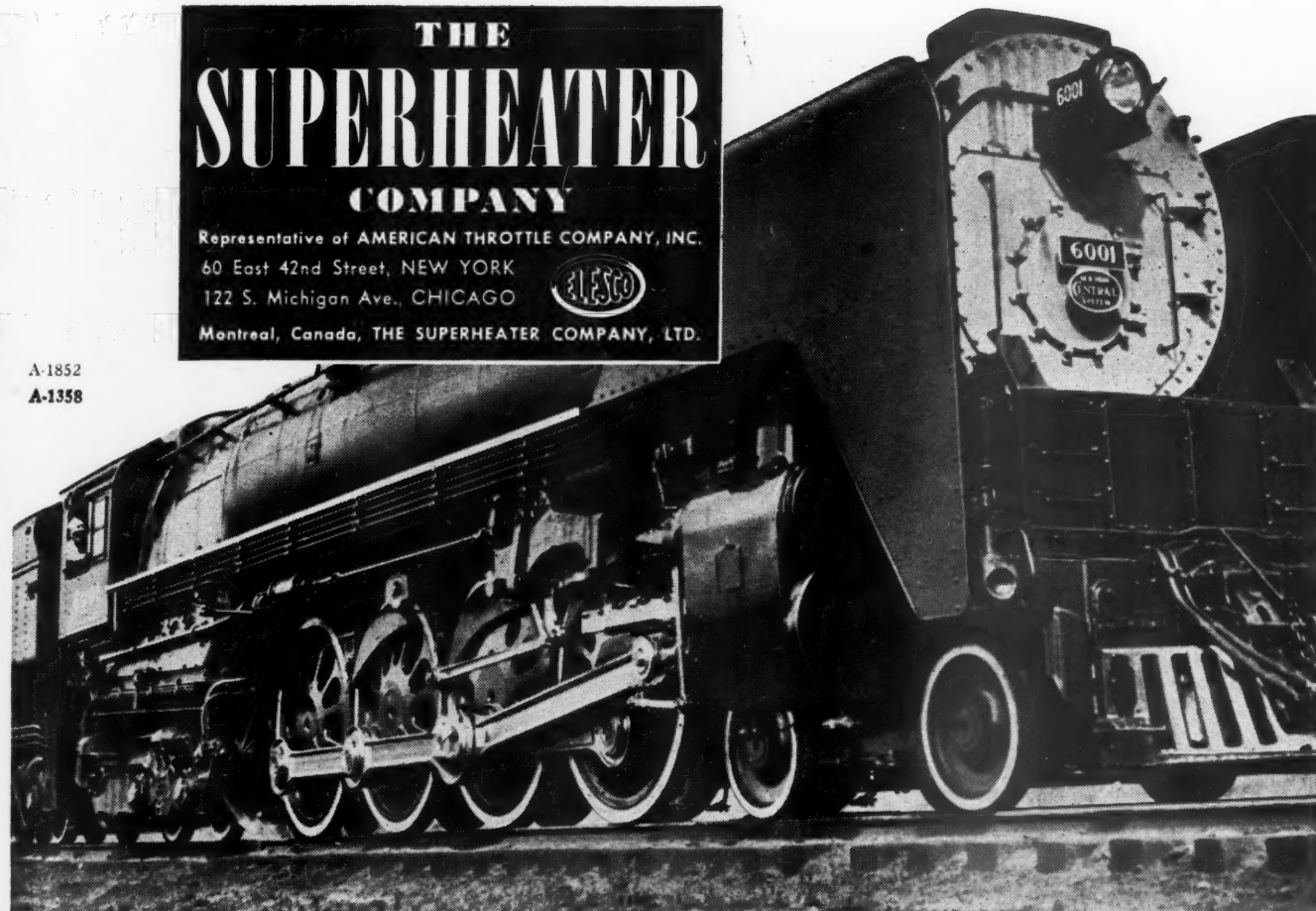
designed to meet the requirements of a  
**Modern Steam Locomotive**

KEEP ABREAST OF SUPERHEATER

PROGRESS WITH ELESKO

## THE SUPERHEATER COMPANY

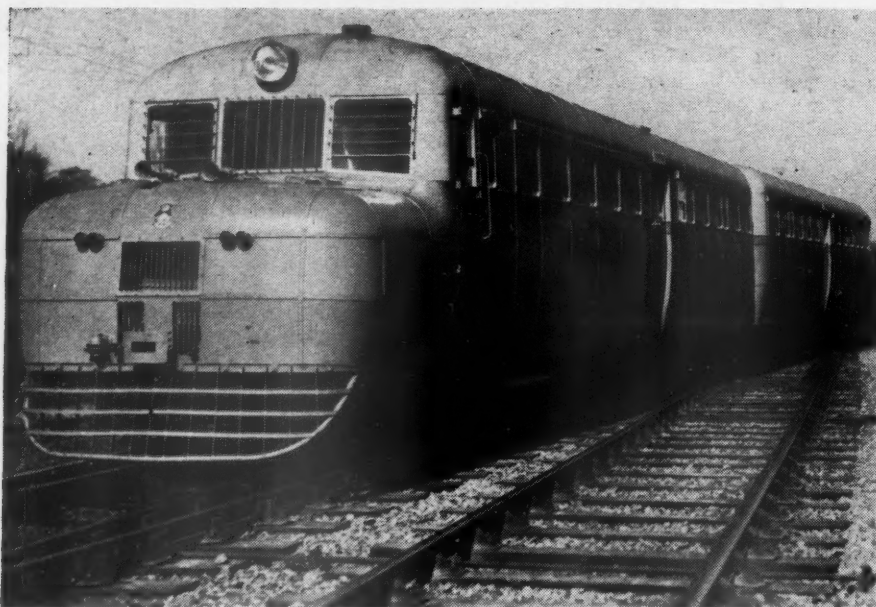
Representative of AMERICAN THROTTLE COMPANY, INC.  
60 East 42nd Street, NEW YORK  
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Superheaters • Superheater Pyrometers • Exhaust Steam Injectors • Steam Dryers • Feedwater Heaters • American Throttles

May 3, 1947

36



British Combine Photo

### British-built self-contained Diesel-powered coaches for the Peruvian Central

have already begun, almost 600 miles having been slated for completion before the end of 1947.

Alterations to or rebuilding of stations receive consideration in the plan. Kings Cross Station in London will be given a new frontage and concourse at an expenditure of more than \$6,000,000. Other stations scheduled for renovation or rebuilding include those at Peterborough, Cambridge, Glasgow and Edinburgh. During the past year 300 smaller stations have been given much-needed coats of paint.

On the equipment side of the plan, the railroad looks forward to the acquisition of 1,000 new locomotives, 5,500 passenger cars and 70,000 freight cars.

## Car Service

The I. C. C. has extended several service orders which had been scheduled to expire on recent dates. The orders, extending amendments, and new expiration dates are as follows:

No. 105 (revised) which directs railroads to distribute company material without back-hauling cars from distribution points to points through which originally moved. Amendment No. 3—November 5.

No. 340 (revised) which provides minimum weights on outbound cars from transfer points in the West where westbound carload traffic is transferred by railroads. Amendment No. 4—November 10.

No. 381 (revised) which requires prompt forwarding from Mobile, Ala., and Bauxite, Ark., of cars comprising trainload shipments of bauxite ore. Amendment No. 1—November 15.

No. 550, which maintains the permit system governing the movement of coal to Great Lakes ports. Amendment No. 3—November 20.

No. 551, which maintains the permit system governing the movement of tidewater coal to Hampton Roads, Va., ports. Amendment No. 3—November 20.

No. 552, which maintains the permit system governing the movement of tidewater coal through North Atlantic ports. Amendment No. 2—November 20.

No. 562 which makes Deputy Director H. C. King of O. D. T. the I. C. C. agent with au-

thority to divert and reroute loaded and empty freight cars to avoid congestion. Amendment No. 2—November 25.

No. 661, which maintains the permit system controlling movements of certain food products from the Pacific Northwest to Atlantic ports for export. Amendment No. 3—June 30.

The O. D. T. has further postponed, from April 30 until June 30, the expiration dates of General Permits ODT-1, Revised 10, and Revised 11, which relax the I. C. I. minimum-loading requirements of General Order ODT-1. Under the first permit, the order's minimum-loading requirements are waived as to westbound and southbound I. C. I. cars from Official Classification territory east of the Indiana-Illinois state line not including any point within the Chicago switching district; under the second, eastbound I. C. I. cars may be forwarded from the same territory, but including the Chicago switching district, when consigned to any one destination with a minimum of 7½ tons per car. The permits are designed to aid in relieving freight-house congestion.

Chairman Warren C. Kendall of the Car Service Division, A. A. R., has requested railroad transportation officers to renew instructions to all stations, yards and terminals that "effective at once open top cars shall be distributed and handled in accordance with Car Service Rules, and such special orders or directives as presently effective or as future circumstances may require."

The request was embodied in an April 26 circular in which Mr. Kendall also said that "it is essential that this action be carried out whole-heartedly by every railroad regardless of any local conditions that may temporarily follow in some cases." A tabulation in the circular showed by districts the percentage of open-top home cars on home rails as of April 1, 1947 and 1946. The figures indicated, as Mr. Kendall put it, that "appropriations and usage contrary to Car Service Rules have been responsible for a heavy dislocation of cars." He noted further that requirements for open tops "are heavier than a year ago and substantial shortages are being reported from all sections of the country."

## Railway Officers

### EXECUTIVE

**L. A. Putnam**, executive vice-president of the St. Johnsbury & Lake Champlain and the Barre & Chelsea at Montpelier, Vt., has been elected president of both companies. The position formerly held by Mr. Putnam has been abolished.

**Paul E. Feucht**, vice-president of the Western region of the Pennsylvania and of the Cincinnati Union Terminal Company, with headquarters at Chicago, has been elected president of the latter company for a one-year term, succeeding J. J. Brinkworth, vice-president and general manager of the Cleveland, Cincinnati, Chicago & St. Louis. A photo of Mr. Feucht and a sketch of his career appeared in the *Railway Age* of October 19, 1946, in connection with his election as vice-president of the Pennsylvania.

**Robert W. Purcell**, vice-president — law of the Chesapeake & Ohio, with headquarters at Cleveland, Ohio, has been elected vice-chairman, a position created by the directors following the annual meeting of stockholders at Richmond, Va. Mr. Purcell was born at Watertown, N. Y., on October 24, 1911, and received his A. B. and LL. B. degrees from Cornell University in 1935. First retained by



Robert W. Purcell

Robert R. Young as counsel in the reorganization of Alleghany Corporation, Mr. Purcell was appointed acting general counsel for the Chesapeake & Ohio and the New York, Chicago & St. Louis in 1943. The following year he was elected general counsel of the two roads and seven months later he was elected vice-president—law of these two lines. In 1946 he also became vice-president—law of the Pere Marquette.

### FINANCIAL, LEGAL AND ACCOUNTING

**W. Donald Steele**, whose appointment as secretary and treasurer of the Wabash at New York was reported in the *Railway*



# 8-year system-wide test on Western road points way to longer life for cylinder and valve bushings

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Cylinder Snap Rings  
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*Age* of April 19, page 808, was born on October 6, 1895, at Creston, Iowa. Mr. Steele began his railroad career in May, 1915, when he entered the service of the



W. Donald Steele

Chicago, Burlington & Quincy in the division superintendent's office at Creston. Entering the United States Army in September, 1917, he served with the 333rd Machine Gun Battalion and was overseas a year. After the war, Mr. Steele was associated with the United States Railroad Administration, the Denver & Rio Grande and the Denver & Rio Grande Western. From April, 1926, to June, 1930, he was statistician and chief clerk to the chairman of the board of the Missouri Pacific, following which he became assistant secretary and assistant treasurer of the Wabash. Mr. Steele served as treasurer and assistant secretary of the Wabash from October 1, 1945, until his recent appointment as secretary and treasurer in charge of the New York office.

## OPERATING

**L. W. Green**, whose appointment as assistant general superintendent transportation of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April 5, entered the service of that road as clerk to the terminal trainmaster at Florence, S. C., on January 1, 1913. He was furloughed for military service in 1916, serving in Texas and Mexico as regimental sergeant major. He returned to the road in 1917 and served in various positions in the transportation department, again being called into military service in World War I. Mr. Green returned to the Atlantic Coast Line in 1919, subsequently serving as chief clerk, terminal trainmaster and trainmaster, and was appointed transportation assistant at Wilmington, on May 1, 1942. Mr. Green was assistant to general superintendent transportation at the time of his recent appointment as assistant general superintendent transportation.

**Frederick H. Berry**, whose promotion to superintendent of terminals of the Louisville & Nashville and Nashville, Chattanooga & St. Louis, at Nashville, Tenn., was reported in the *Railway Age* of April 12, was born on April 21, 1894, at Pensa-

cola, Fla. Mr. Berry entered railroad service in 1911 with the L. & N. as a messenger at Goulding, Fla., and subsequently advanced through positions as crew caller, yard clerk, switchman, yard foreman, gate-man, baggage clerk and stationmaster. During the first world war, Mr. Berry spent 14 months in France with the Army engineers, eight months of which he was in charge of the railway transportation office at Bassens dock, Bordeaux. He returned to the L. & N. following the war, but in 1925 left the road for other work. In 1927 he again became associated with the L. & N. as general yardmaster at Pensacola, Fla., which position he held until 1941, when he was appointed assistant trainmaster at Mobile, Ala. He was promoted to terminal trainmaster at New Orleans, La., in 1942, and in December,



Frederick H. Berry

1946, was advanced to assistant superintendent of terminals at Nashville. Mr. Berry held the latter position at the time of his new appointment.

## TRAFFIC

**P. C. Hankey**, general agent of the Grand Trunk Western at St. Paul, Minn., has been appointed district freight agent at Milwaukee, Wis., succeeding **D. G. Sheehan**, who died recently. Mr. Hankey is succeeded by **A. M. Sharpe**.

**D. E. McKeithen**, assistant freight traffic manager of the St. Louis-San Francisco, at St. Louis, Mo., has been promoted to traffic manager, with headquarters at Kansas City, Mo., succeeding **A. L. Kreamelmeyer**, who has resigned.

**Edward T. M. Carr**, general agent of the Central of New Jersey, with headquarters at Long Branch, N. J., has retired after 65 years of service. **Albert L. Postlethwaite** has been appointed division freight agent to succeed Mr. Carr. The position of general agent has been abolished.

**E. N. Quayle**, commercial agent of the Seaboard Air Line, has been appointed district freight agent, with headquarters as before at Richmond, Va., succeeding **T. C. McDowell**, who has been transferred to Cordele, Ga. The position of commercial agent at Cordele has been abolished.

## ENGINEERING & SIGNALING

**E. M. Loebs** has been appointed chief engineer of the Chicago & Illinois Midland, with headquarters at Springfield, Ill., to succeed **C. H. Paris**, who retired on April 20 after 21 years of service with this company. **N. E. Peterson** has been appointed engineer maintenance of way, also with headquarters at Springfield.

**William J. Turner**, whose appointment as assistant chief engineer of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April 5, was born in Pike County, Ala., on January 16, 1902. After receiving primary and high school education in that county, Mr. Turner was graduated from Alabama Polytechnic Institute in June, 1925, with the degree of B. S. in civil engineering. Entering railroad service on June 1, 1925, with the A. C. L. as rodman in the construction department at Waycross, Ga., he became transitman on construction work in Florida the following September 1. Three years later he was appointed junior engineer in the chief engineer's office and on February 1, 1930, he was appointed assistant engineer at Jacksonville, Fla., becoming senior assistant engineer six months later. Mr. Turner was appointed office engineer at Jacksonville on June 1, 1933, becoming division engineer of the Southern division on May 1, 1940, and acting engineer of design at Wilmington on August 1, 1942. Mr. Turner was advanced to principal assistant engineer on September 16, 1944, and engineer maintenance of way of the Southern division at Jacksonville on June 1, 1945, holding the latter position until his recent promotion to assistant chief engineer.

## MECHANICAL

**C. N. Wiggins**, general foreman of the Louisville & Nashville, at Corbin, Ky., has been appointed assistant general master mechanic, with headquarters at Louisville, Ky., a newly-created position.

**Ezequiel Selley** has been appointed acting superintendent of machinery and equipment of the Mexican Railway, with headquarters at Apizaco, Mex., succeeding **Jose G. Pulido**, who has retired after 30 years of service.

**Gregor Grant**, division master mechanic of the Canadian Pacific, at Nelson, B. C., has been appointed district master mechanic, with headquarters at Calgary, Alta., succeeding **H. M. Allan**, who has retired.

**W. D. Quarles**, superintendent Diesel performance of the Atlantic Coast Line, has been appointed assistant chief of motive power, with headquarters as before at Wilmington, N. C. **H. J. Stein**, electrical engineer, has been appointed mechanical engineer at Wilmington, to succeed **W. J. Crabbs**, who has been appointed assistant chief of motive power and equipment at Wilmington. **G. G. Lynch**, assistant to general superintendent motive power, has been appointed assistant to chief of motive power and equipment, with headquarters as before at Wilmington. **C. J. Olden-**



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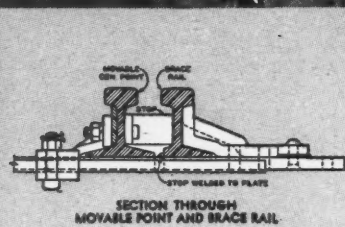
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buttel has been appointed assistant to chief of motive power and equipment at Wilmington. **F. C. Wenk**, road foreman of engines at Tampa, Fla., has been appointed superintendent air brakes at Wilmington. **J. C. Parker** has been appointed assistant superintendent car department at Wilmington, succeeding **H. G. Moore**, who has been appointed assistant chief of equipment at Wilmington. **N. V. Oldenbuttel, Jr.**, has been appointed lubrication inspector at Wilmington.

**George U. Moran** formerly research investigator of the subcommittee on engineering and mechanical research of the Association of American Railroads, at Chicago, has been appointed assistant mechanical engineer, mechanical division, department of operations and maintenance, with the same headquarters, effective March 21.

Mr. Moran was born at West Lafayette, Ind., on January 10, 1898, and was graduated by Amherst College in 1920 with an A. B. degree and by Purdue University in 1922 with a B. S. degree in mechanical engineering. From 1922 to 1930 he was engaged in power plant operation for the Detroit Edison Company, at Detroit, Mich. In 1930 he was appointed research engineer for the same company, and he served in that capacity until 1942, when he became chief of the security branch of the Detroit ordnance district. In July, 1944 he was appointed research investigator of the subcommittee on engineering and mechanical research.

**Robert W. Tonning, Jr.**, whose appointment as electrical engineer of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April 19, was born on January 20, 1915, at Chicago. Mr. Tonning received his B.S. in railway electrical engineering from the University of Illinois in 1937. He entered railroad service with the Chicago, Milwaukee, St. Paul & Pacific on June 20,



**Robert W. Tonning, Jr.**

1935, as extra gang foreman. From July 1, 1937, to February 1, 1941, he served as special apprentice for the New York Central system at Indianapolis, Ind., then becoming electrical gang foreman at the Beech Grove shops there. From August

1 to October 5, 1942, Mr. Tonning was assistant electrical foreman of the latter shops. He then served in the Transportation Corps of the U. S. Army from October 5, 1942, to June 16, 1946. On the latter date he was appointed assistant electrical foreman of the Beech Grove shops of the New York Central, which position he held until April 15, when he went with the Atlantic Coast Line as electrical engineer at Wilmington.

## SPECIAL

**W. J. Berry**, who has been with the Canadian Pacific since September, 1945, has been appointed public relations officer at Toronto, Ont., to succeed **P. T. Cole**, who is opening a new public relations office for the road at Chicago.

**G. C. Stromsoe**, whose appointment as superintendent of safety of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April 19, was born at Boden, Sweden, on November 16, 1903. Mr. Stromsoe entered the service of the Denver & Rio Grande Western on December 9, 1920, as office boy, later becoming stenographer to the chief surgeon. From June 17, 1923, to January 17, 1929,



**G. C. Stromsoe**

he served in various clerical positions in the stores and car departments. On June 8, 1929, he entered the office of the vice-president as clerk, subsequently serving as secretary to assistant general manager and secretary to vice-president and general manager. On May 1, 1936, he became chief clerk to chief engineer, subsequently being appointed assistant to superintendent in charge of safety, which position he held until April 10 when he left the Denver & Rio Grande Western to become superintendent of safety of the Atlantic Coast Line.

**Benjamin R. W. Deacon**, manager of press services, public relations department of the Canadian National and Trans-Canada Air Lines at Montreal, Que., retired on pension on May 1. A portrait of Mr. Deacon appeared in the *Railway Age* of April 26, page 861, in connection with an account the testimonial dinner tendered him. Mr. Deacon was born at Montreal on May 1, 1882, and has been engaged in journalistic and railway press work in

Canada and the United States for more than 40 years. With brief interludes of publicity work which ranged from circus to grand opera, he held important posts on newspapers and magazines in Montreal, Ottawa, Winnipeg and New York, before joining the Canadian National as United States press representative. Mr. Deacon contributed numerous articles and stories to magazines, conducted columns on the Montreal Herald, Winnipeg Telegram and New York Morning Telegraph. He wrote a weekly theatrical review for the Canadian Press during the six years he was superintendent of that organization at New York.

## OBITUARY

**S. A. Morrison**, general manager of the Chicago North Shore & Milwaukee, with headquarters at Highwood, Ill., died on April 24, at Evanston, Ill.

**James Buchanan Ford**, who retired in February of this year as vice-president—industrial development, of the Chicago & Eastern Illinois, at Chicago, died on April 22, at Raleigh, N. C., following an illness of several months. Mr. Ford, who previous to his last position was vice-president in charge of traffic of the C. & E. I., entered railroad service in 1898 as correspondence clerk in the division freight office of the Southern at Raleigh. He subsequently held various clerical positions with that road, and in 1912 was appointed assistant general freight agent of the Cincinnati, New Orleans & Texas Pacific (part of the Southern system), at Cincinnati, Ohio. In 1917 he was advanced to general freight agent of the Southern, and during the first world war was chairman of the Commission of Traffic Control of all Ohio River gateways, United States Railroad Administration. From 1920 to 1925 he served with the Erie as freight traffic manager at Chicago, and later at New York. He became vice-president of the C. & E. I. at Chicago in August, 1925.

**Lee Basil Martin**, general superintendent of the Illinois Terminal, at Springfield, Ill., whose death on April 12 was reported in the *Railway Age* of April 19, was born on September 28, 1879, at Attica, Ind. Mr. Martin was graduated from Purdue University and entered railroad service with the Chicago & Eastern Illinois shortly after leaving college. Following two years of construction work with that road, in 1905 he joined the Pere Marquette as a civil engineer. He became employed by the Illinois Terminal in 1907, advancing through positions as civil engineer and engineer maintenance of way. In 1919 he was advanced to general superintendent at Springfield, the position he held at the time of his death.

**TO STIMULATE TRAVEL.**—As an additional service to passengers, Pan American World Airways' customers using its planes from California to Hawaii are entitled to as many as four Scotch or Bourbon highballs free en route, according to the magazine Air Transport.

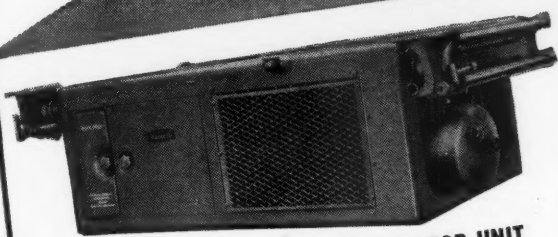


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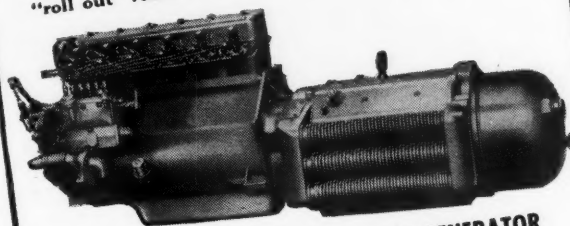
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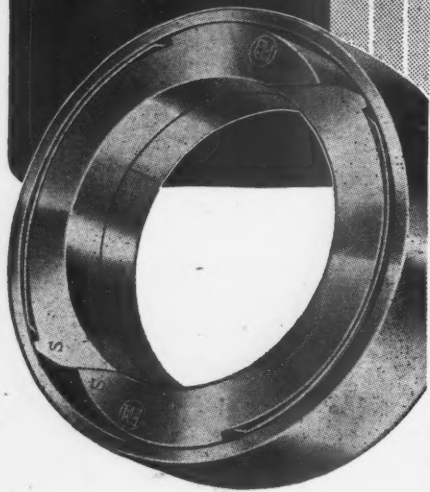
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## News Department

(Continued from page 913)

### Women Railway Employees

Class I railways had 72,943 women employees as of the middle of January, a decrease of 2,917 from the mid-October, 1946, total of 75,860, and the proportion of women employees to total employees fell from 5.51 per cent to 5.48 per cent, according to the latest report on the subject by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

The total of 72,943 women employees as of the middle of January compares with a January, 1946, figure of 98,184. The total of all employees at the same times were 1,332,259 and 1,393,477, respectively.

As compared with mid-October, 1946, there were declines in the mid-January figures for women employees in practically every employment group. The largest number continues to be included in the professional, clerical and general category, for which the mid-January total was 57,699, as compared with the mid-October, 1946, total of 58,876. There were 7,370 women employed in maintenance of equipment and stores, as compared with 8,277 in mid-October, 1946, 7,582 as compared to 8,357 in transportation work, other than train, engine and yard service, and 181 as compared to 225 in maintenance of way and structures.

At mid-January, 17 women were employed as executives, officials or staff assistants, 22 as switchtenders and 72 in train and engine service.

### Propose 10-Cent "Red Cap" Fee Be Included in Fare

A 10-cent "red cap" fee for handling each piece of passenger baggage should be included in the passenger fare increases being sought by the railroads from the Interstate Commerce Commission, the United Transport Service Employees, C. I. O., at Chicago, declared in a letter to all railroads this week. The union proposed that a coupon allowing the privilege of red cap handling of passenger luggage be affixed to all passenger tickets between terminal points.

### Army's Railroaders Have Their Peacetime Program

The plans of the Transportation Corps of the Army to carry on research for the purpose of developing railroad equipment specially adapted to the nation's possible military needs anywhere in the world, and its program for maintaining an effective liaison between the Army's transportation officers and the railroads in time of peace were discussed by Major General Edmond H. Leavey, chief of transportation of the Army, in a speech prepared for delivery April 26 at an Altoona, Pa., meeting of Pennsylvania supervisory employees.

General Leavey said in part:

"The cessation of hostilities reduced but did not eliminate our need for trained operating and shop railroad personnel.

Some of our railroad units still are on duty overseas and the Third Military Railway Service is in charge of the operation of Japanese railways. In the United States the Army operates its utility railroads on various posts, camps and stations. While the maximum use is made of civilian railroad personnel overseas, the Transportation Corps must send trained military personnel to supervise the work of these employees. . . .

"During the war the American railroads gave us immeasurable help by training our battalions on their roads. Soldier worked side-by-side with his civilian counterpart and learned his railroading in the greatest laboratory in the world—the American railroad system. This contribution, together with the units sponsored by the railway companies, was a prime factor in the excellent performance of the Army's railroaders. It is the War Department's plan to continue this alliance with industry, to once more ask certain industrial firms to sponsor military units of the organized reserve whose personnel would work in these various industrial organizations. Such an arrangement would assure the War Department that competent specialists, grouped into military organizations would, on any future M-Day, be available for immediate duty. . . .

"The future rail research and development program of the Transportation Corps is to develop and standardize motive power and rolling stock suitable for the overall requirements of military rail transport in any theater of operations. In this standardization, requirements for equipment will be met by the use of a minimum number of items and designs of equipment. Provisions must be made in the designs of each item of equipment to provide maximum adaptability, without major alteration, for the operation of the equipment on any of the various track gauges encountered in foreign areas of operations.

"Other characteristics that must be considered are the suitability of the equipment to adopt various types of couplers and coupler arrangements, structural clearances and track conditions. Permissible axle loadings are generally less on foreign railroads than on American railroads, which affects the design of military rail equipment, especially motive power. Because of these factors and other military considerations, it is necessary to make some departures from standards and practices adopted by the American railroad industry, although every endeavor is made to comply as far as practicable with these well-established standards. Commercial and other scientific development in power equipment, including steam and gas turbines (both coal and oil-fired), various types of Diesel locomotives, and other power developments having possible Transportation Corps applications are being studied. Our program includes the development of freight cars, hospital cars, troop sleeping cars and motive power and the continual study and development of components of standard items of equipment including engines, transmissions and auxiliary equipment to provide the maximum interchangeability and standardization of parts and sub-assemblies.